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Investing in rural people

Socialist Republic of Viet Nam
Country Strategic Opportunities Programme
2019-2025

Note to Executive Board representatives

Focal points:

Technical questions:

Thomas Rath
Country Director/Hub Head
Asia and the Pacific Division
Tel.: +84 (0) 24 37265104
e-mail: t.rath@ifad.org

Nigel Brett
Director
Tel.: +39 06 5459 2516
e-mail: n.brett@ifad.org

Dispatch of documentation:

Deirdre McGrenra
Chief
Institutional Governance and
Member Relations
Tel.: +39 06 5459 2374
e-mail: gb@ifad.org

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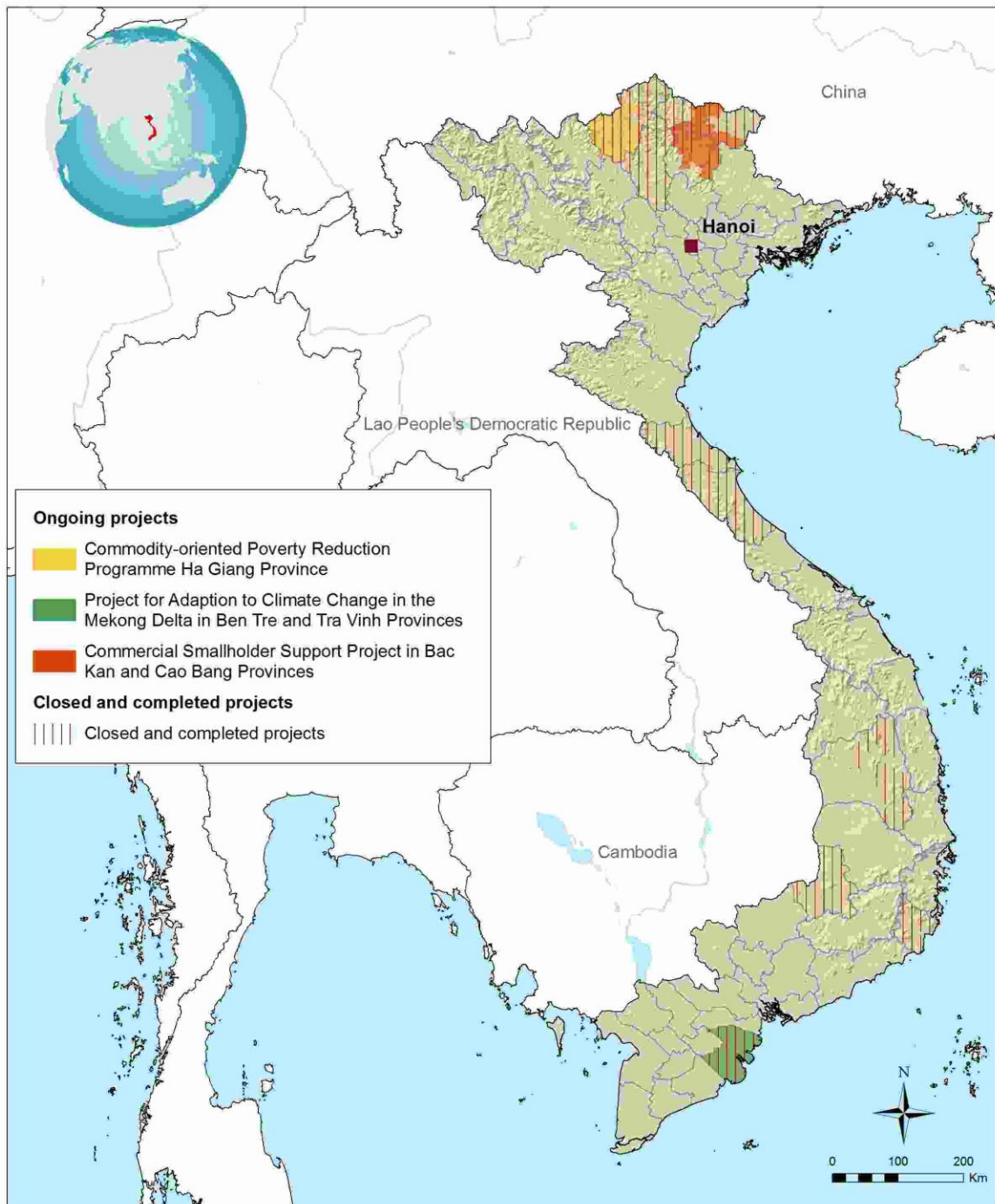
Abbreviations and acronyms

Agri-SME	agricultural small and medium-sized enterprise
ASAP	Adaptation for Smallholder Agriculture Programme
ASEAN	Association of Southeast Asian Nations
CIAT	International Center for Tropical Agriculture
COSOP	country strategic opportunities programme
FAO	Food and Agriculture Organization of the United Nations
GEF	Global Environment Facility
ILO	International Labour Organization
INDC	Intended Nationally Determined Contribution
IPSARD	Institute of Policy and Strategy for Agriculture and Rural Development
JICA	Japan International Cooperation Agency
MOP-SEDP	market-oriented and participatory socio-economic development plan
NTP-NRD	National Target Programme on New Rural Development
NTP-SPR	Sustainable Poverty Reduction Programme
OCOP	One Commune, One Product
OSP	One Strategic Plan
SDG	Sustainable Development Goal
SECAP	Social, Environmental and Climate Assessment Procedures
SNV	Netherlands Development Organisation
SSTC	South-South and Triangular Cooperation
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization

COSOP delivery team

Regional Director:	Nigel Brett
Country Director/Hub Head:	Thomas Rath
Lead Regional Economist:	Fabrizio Bresciani
Senior Technical Specialist – Nutrition:	Antonella Cordone
Financial Management Officer:	Álvaro Fernández

Map of IFAD-funded operations in the country



The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.

Map compiled by IFAD | 14-05-2019

Executive summary

1. The Socialist Republic of Viet Nam has a predominantly rural population with a vibrant agricultural sector in which smallholders represent a large majority. While poverty is rapidly decreasing, its incidence is highest among rural populations and ethnic minorities in mountainous provinces.
2. IFAD has an important comparative advantage as an agent of change in agriculture and rural finance for sustainable inclusive development. IFAD-funded projects contribute directly to the territorial harmonization of government policies.
3. This country strategic opportunities programme (COSOP) is targeted to smallholders and agricultural small and medium-sized enterprises in underserved areas with a concentration of ethnic minorities. Its overarching goal is to sustainably improve incomes of smallholders and rural poor people through market participation and reduced climate vulnerability. Its strategic objectives are to:
 - Strategic objective 1:** Build pro-poor and stable value chains leveraging significant investments from the private sector;
 - Strategic objective 2:** Enhance and expand financial inclusion for climate-resilient rural livelihoods; and
 - Strategic objective 3:** Foster the environmental sustainability and climate resilience of ethnic minorities' smallholder economic activities.
4. IFAD's performance-based allocation will be approximately US\$43 million in the Eleventh Replenishment of IFAD's Resources (IFAD11; 2019-2021). It is hoped that the allocation for IFAD12 (2022-2025) will return to US\$84 million. In order to support priority areas requiring significant technical assistance and capacity-building, IFAD will seek to mobilize non-lending resources.

Socialist Republic of Viet Nam

Country Strategic Opportunities Programme

2019-2025

I. Country context and rural sector agenda: Key challenges and opportunities

A. Economic and social transformation in Viet Nam

1. With a GDP growth well above 7 per cent, the Socialist Republic of Viet Nam's economy is performing well, propelled by the sustained global recovery and continued domestic reforms. Growth in agricultural outputs has accelerated to 3.9 per cent, largely due to strong performance in the export-oriented fishery subsector. Between 2008 and 2017, the absolute contribution to GDP by agriculture, forestry and fisheries grew by 70 per cent from US\$20.2 billion to US\$34.3 billion. Government investments have significantly improved service delivery, education, and public infrastructure, which facilitated growth and enabled broad participation in the economy.
2. The contribution of agriculture to Viet Nam's GDP decreased from 25 per cent in 2000 to 15 per cent in 2018, reflecting the country's gradual transformation from an agrarian to a labour-intensive manufacturing and service economy.
3. The proportion of the population living below the national poverty line is 9.8 per cent (9 million in 2016) – down by over 70 per cent from 1993. Poverty is predominantly rural (95 per cent) and linked to remoteness and ethnicity (73 per cent).¹ Viet Nam's food security level considered moderate.² Undernutrition is prevalent among ethnic minorities and rural poor households. Stunting among children under 5 averages 17.7 per cent in the majority Kinh ethnic group, while the stunting rate is 32 per cent in ethnic minority groups.
4. Young persons aged 15-24 account for 15 per cent of the labour force. Agriculture still offers the most employment opportunities, yet these jobs are often precarious and low paid.
5. Growth in the agricultural sector has been heavily dependent upon unsustainable exploitation of natural resources. Cheap labour and the overuse of agro-chemicals have underpinned the "successful" expansion and intensification of agricultural production.
6. Both agricultural and rural poverty alleviation gains are jeopardized by extreme weather events such as typhoons, flooding and drought, and encroaching climate change impacts.³ Corruption remains a high risk while government policies have made substantial gains in reducing its occurrence.⁴

B. Scenarios⁵

7. In the base-case scenario, Viet Nam's medium-term outlook further improves. Increased pressure on the natural resource base is amplified by climate change impacts while incentives for smallholder agriculture systems to adapt to climate change and participate in higher-value commodity markets remain inadequate.

¹ Climbing the Ladder: Poverty Reduction and Shared Prosperity in Viet Nam, World Bank, 2018.

² Global Nutrition Report 2018: <https://globalnutritionreport.org/reports/global-nutrition-report-2018/>.

³ Viet Nam ranks 6th globally in climate vulnerability.

⁴ <https://www.Viet-Nam-briefing.com/news/Viet-Nams-corruption-perception-ranking-declines-2018.html/>.

⁵ More detail is provided in the transition scenarios in appendix II and in the Social, Environmental and Climate Assessment Procedures (SECAP) in appendix IV.

8. In a high-case scenario, economic growth remains robust with strong export trends facilitated by international trade agreements with the Association of Southeast Asian Nations (ASEAN), European Union and South Korea. Public investments are limited by budget constraints, while private investments will remain dynamic.
9. The lower-case scenario combines a slowdown in China's growth and frequent extreme weather events. The regional slowdown could result in a reduced flow of foreign direct investments.

II. Government policy and institutional framework

A. Agricultural and rural development policies

10. In the Strategy for Development of Agriculture and Rural Areas, the objective until 2030 is to develop agriculture into a major strategic export sector, maintaining an annual growth rate of between 3 per cent and 3.2 per cent in agricultural GDP, and increase value-added processing and agribusiness by 35 per cent.
11. Through the Agriculture Restructuring Programme, the Government's Industry 4.0 vision includes an initiative by the Ministry of Agriculture and Rural Development to promote "smart agriculture" in order to integrate it into future agricultural development programmes. Between 2021 and 2025, the Government intends to continue prioritizing this programme.
12. The goal of the National Target Programme on New Rural Development (NTP-NRD) is the comprehensive development of rural communes in terms of economic, cultural, environmental, social and public security. The aim is for 50 per cent of communes to achieve "new rural commune" status by 2020.

B. Youth policy

13. The Government's Youth Development Strategy 2011-2020 is multi-sectoral and covers all aspects of youth well-being including health, vocational training, drug control, employment, life skills and civic and political participation. Various laws and decrees are being established to support vocational training and the creation of employment opportunities for youth.

C. Ethnic minority development policies and programmes

14. The Government's principal programme targeting poverty reduction among ethnic minorities is the Sustainable Poverty Reduction Programme (NTP-SPR). It supports infrastructure development, livelihoods, basic services and capacity-building for the country's 94 poorest districts and 310 communes in coastal areas through five sub-programmes. Its current phase (2016-2020) is aimed at: (i) lowering the poverty rate by an average of 1.5 per cent per year; (ii) improving poor people's livelihoods and quality of life by increasing poor households' per capita income by 150 per cent between 2015 to 2020; (iii) implementing poverty-reduction policies and mechanisms in a consistent and effective manner; and (iv) investing in the infrastructure of poor districts, communes and villages.

D. Climate change and green growth

15. The National Target Programme for Climate Change Response and Green Growth 2016-2020 aims at enhancing the country's capacity to respond to climate change.
16. In September 2015, Viet Nam submitted its Intended Nationally Determined Contribution (INDC) to the United Nations Framework Convention on Climate Change.⁶ The INDC priority actions for 2021-2030 aim to minimize the loss of life and property due to climate change through: (i) the development of climate change-informed socio-economic development plans; (ii) early warning systems;

⁶ Viet Nam signed the Paris Agreement on 22 April 2016.

(iii) the adoption of adaptation processes in the most vulnerable communities; and
(iv) technology and finance for climate change adaptations to increase resilience.⁷

E. One Strategic Plan (2017-2021)

17. The One Strategic Plan (OSP)⁸ (2017-2021) is shaped by the Sustainable Development Goals (SDGs) and structured into four focus areas: (i) investing in people; (ii) ensuring climate resilience and environmental sustainability; (iii) fostering prosperity and partnerships; and (iv) promoting justice, peace and inclusive governance. The country strategic opportunities programme (COSOP) directly contributes to the OSP results framework. IFAD actively engages in the United Nations country team and the results group on climate resilience.

III. IFAD engagement: lessons learned

A. Results achieved from the previous country strategic opportunities programme

18. Overall performance of the 2012-2017 COSOP was assessed as satisfactory.⁹ The IFAD loan portfolio focusses on establishing pro-poor value chains, access to microfinance, women's economic empowerment, addressing climate change and reinforcing a participatory planning and decision making approach from the community level upwards. IFAD's grant funded projects strengthen institutional capacities in terms of pro-poor value chains and climate change adaptation.
19. Households' income increased after receiving support from IFAD projects by at least 25 per cent in almost all targeted commodities. Overall, poverty was reduced by 38.4 per cent between 2012 and 2015, exceeding the target of a 20 per cent reduction in income poverty in the targeted communes. The share of women, ethnic minorities households and other vulnerable groups averaged 50 per cent of beneficiaries.
20. Public-private partnerships have facilitated US\$20 million in private-sector investments in agricultural value chains. These investments included 109 enterprises – a 100 per cent increase over the baseline, which far exceeded the target of 20 per cent for these activities. More than 30,000 farm households, including 53 per cent poor and near-poor households, have benefited from better input supplies and output markets, and 4,755 new jobs have been generated. At the commune level, a market-oriented and participatory socio-economic development plan (MOP-SEDP) has been rolled out beyond the target provinces as an important planning tool for integrating resources. Local infrastructure has improved through the implementation of a community development fund. More than 100,000 women became members in the newly Established Women's Development Funds to serve as a new microfinance institution in 11 provinces.

B. Lessons

21. A number of climate change adaptation models financed through IFAD projects did not perform well under severe weather conditions including drought and flood. Further progress will be contingent on integrating disaster risk and climate change adaptation scenarios into local MOP-SEDPs and value chain action plans.
22. Agricultural value chain development is not feasible in all target communes, especially those in remote and disadvantaged areas, where local commodities have low market potential and the private sector is not interested in investing due to high transaction costs. Specific measures are required to trigger economic development in poor, remote communities.

⁷ In 2019, the government will release the National Adaptation Plan 2020-2030, building on lessons learned through implementing its National Climate Change Strategy.

⁸ The OSP for Viet Nam replaces the United Nations Development Assistance Framework.

⁹ For more details, see the COSOP completion review for 2012-2018.

23. In order to leverage greater investment from private sector in inclusive and sustainable rural value chain development, it is important to start with producers who are closer to end markets, and progressively expand towards more remote areas.
24. Access to agricultural credit by rural producers is a government priority. State-owned commercial banks promote subsidized credit schemes with a high risk of unsustainability. In contrast, rural microfinance through saving and credit groups related to the Women's Development Fund scheme has been effective in reaching poor rural women in a sustainable manner.
25. With regard to gender equality and women's empowerment, direct and self-targeted support to poor rural women has increased their access to technology, knowledge and finance, and boosted their socio-economic status and decision making.
26. IFAD-supported projects in Viet Nam have performed well in terms of financial management, with problems at start-up addressed swiftly. The government policy on official development assistance has restricted provinces' access to funding and jeopardized timely implementation, elevating the risk of underperformance.

IV. Country strategy

A. Comparative advantage

27. Viet Nam has a predominantly rural population with a vibrant agricultural sector in which smallholders represent a large majority, contributing to sustained growth, mitigating shocks and providing much of rural employment and raw material for the country's agro-industries. The value added by IFAD-funded operations lies in their people-centered nature and deep roots in smallholder agriculture. The integration of targeting into project design and implementation ensures that public and private investments include smallholder farmers and rural poor people. In Viet Nam, IFAD's efforts have particularly benefitted ethnic minorities while strengthening institutional capacity in the communes that need it most.
28. IFAD has an important comparative advantage as an agent of institutional and technological change in agriculture and rural finance for sustainable, inclusive development. The IFAD country programme is recognized for directly contributing to harmonizing diverse government policies in the agricultural, rural and environmental domains.

B. Target group and targeting strategy

29. **Target groups.** The COSOP is targeted to smallholders and agricultural small and medium-sized enterprises (agri-SMEs) in underserved areas, where ethnic minorities are often concentrated.
30. Poor smallholder farmers and their households with potential to improve agricultural production will be supported to benefit from inclusive value chains and related infrastructure (post-harvest, primary processing, etc.), as well as to manage weather and climate risks, obtain nutritious diets, improve food safety and traceability, and comply with quality standards.
31. Ethnic minorities, subsistence farmers in upland areas and landless poor people will be engaged to identify opportunities for generating sustainable, climate-resilient, nutrition-sensitive livelihoods within their unique cultural contexts.
32. Rural women will be targeted with enhanced learning opportunities to assume new leadership and entrepreneurial roles within communities. The participation of women in development boards will also be promoted. IFAD's success in supporting access to financial services through Women's Development Funds will provide a strong foundation for fostering women's entrepreneurship. Women will access labour-saving technologies such as drip irrigation and food-processing equipment.

33. Rural youth will be integrated into public programmes such as Vocational Training for Rural Workers to 2020 aimed at enhancing technical and business skills for business and youth entrepreneurship. IFAD will engage through non-lending activities to enhance access to rural financial services for young entrepreneurs and encourage enterprises to develop decent employment opportunities for young men and women.
34. **Targeting strategy.** The COSOP and related projects will continue the good practice of geographical targeting by focusing investments in districts and communes with high poverty rates, which are often home to ethnic minorities. The central and northern highlands are particularly vulnerable to climate change impacts and constrained by remoteness to markets and inadequate financial, technical and business-development services. There is also a need to continue investing in the Mekong Delta to address climate change-related challenges such as salinity intrusion in farmlands.¹⁰
35. At the household level, poor men and women smallholders will be involved in IFAD projects through: participatory planning; adapted training; access to pro-poor business development services; access to nutrition programmes; access to inclusive financial services; and efforts to link smallholders with markets and the private sector (including rural small and medium-sized enterprises, and large agrifood enterprise such as VinEco and Metro-C). In most cases, a self-selection principle will apply.

C. Overall goal and strategic objectives

Theory of change

36. Viet Nam's transformation from an agrarian to a manufacturing and export-oriented economy has boosted employment and income, and reduced poverty at a breathtaking pace. It has also brought new challenges such as the requirements of new export markets, the non-sustainable use of natural resources, land and water pollution, and growing vulnerability to climate change. Poverty and undernutrition remain key challenges in rural areas, especially for ethnic minorities. Rural areas take the main brunt of natural disasters and climate change, while rural communities face difficulties in accessing markets, finance, technology and know-how to improve their livelihoods. There is a risk that inequalities could grow if these challenges are not addressed.
37. The COSOP will address the challenges noted above for rural poor and smallholder farmers by sharpening IFAD's successful pro-poor value chain approach. The COSOP will involve engagement with the private sector to facilitate access to markets, finance and technology in order to establish demand-driven, pro-poor, climate-smart and nutrition-sensitive value chains. Since access to value chain finance for smallholders remains a major challenge, investments in sustainable microfinance systems such as the IFAD-supported Women's Development Funds will be important. A conducive policy framework, notably with the State Bank of Viet Nam, will be supported to render financial services sustainable, inclusive and climate smart.
38. The last COSOP confirmed that value chains have limited impact in remote rural locations, which are often home to ethnic minorities. Here, investments need to focus on innovative, climate-smart livelihood opportunities including agricultural niche products and eco-tourism. Communities need assistance in developing their own development pathways, improving their nutrition and establishing climate change-resilient livelihoods.

¹⁰ Salinity intrusion constitutes a major threat to national food security since the Mekong Delta is the country's main rice production area.

Strategic objectives

39. The COSOP embraces a people-centric strategy targeting smallholders and agricultural small and medium-sized enterprises (Agri-SMEs) in underserved areas with high concentrations of ethnic minorities. It supports the Government of Viet Nam in achieving its national development goals and the SDGs. COSOP results will feed directly into the United Nations OSP 2017-2021 for Viet Nam in focus areas 1 (investing in people) and 2 (climate resilience and environmental sustainability), and SDGs 1 (no poverty), 2 (zero hunger), 5 (gender equality) and 13 (climate action). IFAD investments also contribute to the country's INDC.

Strategic objective 1: Build pro-poor and stable value chains leveraging significant investments from the private sector;

Strategic objective 2: Enhance and expand financial inclusion for climate-resilient rural livelihoods; and

Strategic objective 3: Foster the environmental sustainability and climate resilience of ethnic minorities' smallholder economic activities.

40. IFAD11 priorities are mainstreamed across all three strategic objectives. IFAD's country programme empowers women through access to technology and finance so that they engage in value chains and strengthen their own institutions. Similarly, the COSOP targets youth with a focus on access to finance, technology and employment opportunities within value chains. Nutrition cuts across all strategic objectives but is most prominent in strategic objective 3, which targets ethnic minorities with undernutrition rates above the national average. Sensitization on nutrition and diversified diets, and on social issues such as early pregnancy and breast feeding will be accompanied by practical investments to enhance access to nutritious food. These will be pursued together with Viet Nam's Women's Union and the United Nations Children Fund (UNICEF). Climate change adaptation cuts across the entire Viet Nam portfolio and all three strategic objectives. Value chain investments and associated loan products will be linked to become climate resilient. Value chains will become more resilient by scaling up climate-smart agriculture practices, and fostering policies that tackle the climate change-related issues facing the Mekong Delta and farm-level adaptation.

D. Menu of IFAD interventions

Loans and grants

41. Through strategic objectives, the COSOP will aim to add value to pro-poor value chains and achieve a more equitable distribution of value among value-chain players through: skills development of farmers; greater integration of value chains, contract farming and contract programmes; and incentives for the establishment and modernization of agricultural processing plants. The primary investments will be in farmers' organizations, transport, processing, infrastructure, business development services, value-chain governance and high-level technical assistance. These interventions will also address young people's demand for decent and well-paid employment. An IFAD regional grant will assist Viet Nam in designing participatory, multi-stakeholder approaches to value chain development roadmaps, wherein investment plans and policy reform paths are agreed upon. Another regional grant will support the digital transformation of smallholder agriculture.
42. Towards strategic objective 2, IFAD will continue supporting the development of sustainable microfinance systems, including support to ongoing Women's Development Fund schemes and their graduation to registered microfinance institutions. At the same time, the Fund will mobilize its non-lending programme at the regional and national levels, and deepen its partnership with the State Bank of Viet Nam by contributing to Viet Nam's financial inclusion strategy. A new loan-funded project for the microfinance sector will not be pursued since current government policies do not foresee the use of official development assistance for rural finance. Should the policy change in the future, IFAD will be able to step up its support.

43. Through strategic objective 3, the COSOP will target households for which the value chain approach is not relevant or feasible. Improvements in infrastructure are needed to reduce poverty and create options for sustainable livelihoods. The latter includes tourism that promotes cultural identity and sustainable agricultural development opportunities. IFAD's operations are in line with the Government's One Commune, One Product (OCOP) strategy to promote local certified products along with nutritious local vegetables, fruits, fish and livestock with the aim of reducing chronic poverty and undernutrition.
44. The COSOP will take into account major climate change constraints by reinforcing adaptation and mitigation for agriculture, including soil and water conservation, water management and agricultural insurance, particularly in the most vulnerable mountainous areas.
45. If Viet Nam decided not to borrow anymore, the COSOP would focus on supporting the ongoing loan funded portfolio, and engage in advisory services and policy engagement through its regional and national grant portfolio in order to support Viet Nam in the design and implementation of the SEDP 2021-2025. IFAD would engage with partners notably the UN on advocating key issues such as gender equality, poverty targeting, nutrition and climate resilience.

Country-level policy engagement

46. Policy engagement will follow the COSOP strategic objectives. It will be facilitated by knowledge partnerships at the national and international levels in order to promote policies that foster and scale up innovations for smallholder agriculture.
47. IFAD's new partnership with the State Bank of Viet Nam will provide opportunities for contributing to policies on microfinance, such as the Financial Inclusion Strategy.
48. IFAD's engagement in the Mekong Delta working group contributed to shaping Resolution 120 and its action plan to address climate change issues in the Delta. The IFAD- and European Union-funded regional grant has built an excellent platform for policy dialogue to promote the critical role of farmers' organizations in supporting inclusive value chains for smallholders. A new IFAD regional grant aims to foster networking among agricultural policy think tanks across the Mekong region.
49. The South-South and Triangular Cooperation (SSTC) grant facility offers opportunities for policy engagement. It is planned to support the benchmarking of critical domestic agriculture and rural development policies as a basis for enhancing the corresponding regulatory and institutional frameworks.

Partnerships to support COSOP strategic objectives

50. Partnerships are aimed at mobilizing resources and building the capacities of government and civic institutions. Leveraging the resources and knowledge of the private sector is a central feature of this COSOP. In this context, engaging with new partners such as the Sustainable Trade Initiative, will enable IFAD developing innovative approaches to public private partnerships and expanding its policy influence. IFAD will deepen its partnership with the Ministry of Agriculture and Rural Development to link with the National Target Program for New Rural Development (NTP-NRD) and OCOP on inclusive value chain development
51. Partnerships with the State Bank of Viet Nam foster the formalisation of sustainable microfinance institutions such as the WDF. The Viet Nam's Women's Union is a key partner for policy issues as regards gender equality. The Committee on Ethnic Minority Affairs will be a key partner to enhance opportunities for scaling up through policy interventions. The Farmers Union remains a critical partner in extending technical support and business development services to farmer groups.

52. The COSOP will deepen longstanding partnerships with the Institute of Policy and Strategy for Agriculture and Rural Development (IPSARD)¹¹ on policy research, and with international and national research centers such as the International Center for Tropical Agriculture (CIAT) and the International Rice Research Institute for technology transfer and climate change adaptation. The International Food Policy Research Institute, the Netherlands Development Organisation (SNV), Helvetas and the Regional Value Chain Capacity Building Network will remain strong partners in inclusive value chain development. Partnerships with UNICEF and the Food and Agriculture Organization of the United Nations (FAO) will be harnessed to mainstream nutrition in IFAD-funded operations.

Knowledge management

53. The IFAD Country Office (ICO) will lead the COSOP learning function by linking project monitoring and evaluation with innovation management, scaling up and policy engagement. . The ICO organizes the Mekong Learning and Knowledge Fair each year for partners from the public and private sectors to meet and share innovations and policies with proven success in boosting smallholder agricultural and enterprise development. The ICO, in collaboration with the project knowledge management focal points will produce knowledge products including policy briefs, policy analytical papers, technical reports, media articles ready for dissemination through social media networks, events, television and other media.
54. **South-South and Triangular Cooperation (SSTC)** offers opportunities for leveraging knowledge and financial resources (see appendix VII). The COSOP will engage in SSTC by:
- (i) Supporting private-sector engagement in pro-poor value chains through business-to-business and community-to-community linkages (strategic objective 1). Farmers would benefit from better connectivity to markets abroad and harmonization of food safety standards, which would facilitate the export of their produce.
 - (ii) Promoting policy exchanges on agriculture and rural development (strategic objectives 1 and 2). Benchmarking of domestic agriculture and rural development policies would foster the replication of good practices for enhancing regulatory and institutional frameworks from other countries.
 - (iii) Promoting the sharing and adoption of rural development solutions for climate change adaptation and resilience (strategic objective 2). This would be achieved through the IFAD Rural Solutions Portal, the annual Mekong Learning and Knowledge Fair, and other regional solution-sharing events.

V. Innovations and scaling up for sustainable results

A. Innovations

55. “Smart” agriculture is a major government priority in order to prepare the agriculture sector for the future. The value chain approach has the potential to be transformative for Viet Nam’s smallholder farmers and to catalyse investments in skills development, water conservation, access to markets, financing, natural resource management, early warning systems for climate hazards, clustering production for better visibility and market penetration. IFAD will design and implement a robust innovation management mechanism that creates an appropriate learning environment for farmers and agri-SMEs using resources available from regional- and country-level grant-funded projects.

B. Scaling up

56. Scaling up involves three converging efforts: rigorous monitoring and analysis of project results, including innovations; knowledge management; and engaging in

¹¹ The think tank of the Ministry and Agriculture and Rural Development.

policy dialogue. The scaling-up strategy will focus on a climate informed MOP-SEDP, climate change adaptation, microfinance, inclusive value chain development and building opportunities for vulnerable groups and ethnic minorities.

57. The key drivers will be government programmes (such as NTP-NRD and OCOP), the private sector and policy think tanks. These actors will be engaged directly through joint programmes, knowledge-sharing activities and policy events.

VI. COSOP implementation

A. Financial envelope and cofinancing targets

58. IFAD financing was capped at approximately US\$43 million for IFAD11 (2019-2021) but may return to its previous level of approximately US\$86 million for IFAD12 (2022-2024) for a total of approximately US\$129 million. IFAD's regional target is for national and international cofinancing is 110 per cent each. National cofinancing is expected from the private sector, national programmes and cash and in-kind contributions from beneficiaries. The COSOP foresees one loan-funded project for IFAD11 and one for IFAD12.
59. The Government expects grant-funded contributions of 25 per cent from IFAD or other development partners to support innovations and policy development, which require significant technical assistance. IFAD will seek to mobilize non-lending resources from the Green Climate Fund and Global Environment Facility (GEF), funding from bilateral development partners, Adaptation for Smallholder Agriculture Programme (ASAP) funds (for climate), and IFAD regional and country grants. Support will also be sought from IFAD's South-South Technical Cooperation Programme and new partnerships.

Table 1

IFAD financing and cofinancing of ongoing and planned projects (Millions of United States dollars)

Project	IFAD financing*	Cofinancing**		Cofinancing ratio
		Domestic	International	
Smallholder Economic Empowerment and Climate Resilience Project	43	47	47	National: 1.1
Climate Smart Smallholder Value Chain Project	43-86	47-94	47-94	International: 1.1
Total	86-129	94-141	94-141	

* IFAD allocation: Note that the performance-based allocation for 2022-2024 represents an estimation and requires approval by IFAD's Executive Board in December 2021.

** Amounts do not represent any commitments by the Government of Viet Nam or other partners. The estimates only serve as targets.

60. Government counterpart, recurrent and capital cost financing is estimated at US\$47 million for IFAD11. This may double in IFAD12 if the allocation returns to its original level and the Government continues to borrow. The total programme (IFAD11 and IFAD12 plus counterpart contributions) could reach between US\$274 million and US\$411 million.

B. Resources for non-lending activities

61. Decisive climate action requires substantial new partnerships for resource mobilization. Financing from the Green Climate Fund will be sought to foster climate change adaptation and mitigation from the national level (i.e. policy engagement) to on-farm climate-smart agriculture interventions. Financing from GEF will also be sought to support the conservation of agricultural and forest biodiversity resources of cultural and economic importance to ethnic minorities. IFAD regional and country grants, and the new SSTC facility will continue

addressing the need to build capacity for inclusive value chain development, smart agriculture, gender equality, nutrition and policy development.

C. Key strategic partnerships and development coordination

62. The breadth and depth of climate change adaptation-oriented interventions is dependent upon IFAD's ability to obtain grant financing or leverage partnerships with other organizations such as the Asian Development Bank, Asian Infrastructure Investment Bank, World Bank, FAO, the Japan International Cooperation Agency (JICA), the Netherlands and the European Union for technical assistance, studies, knowledge management, quality control, institutional capacity-building, training and extension.

D. Partnerships with United Nations agencies

63. The United Nations has an important role to play in supporting multi-stakeholder partnerships for human rights, inclusion and equity. In line with the OSP 2017-2021, IFAD will partner with other United Nations agencies on the IFAD11 priorities of climate (FAO and United Nations Development Programme [UNDP]), gender and ethnic minorities (UNDP and UN Women), youth (UN Women, the United Nations Industrial Development Organization [UNIDO] and the International Labour Organization [ILO]) and nutrition (FAO, UNICEF, the CGIAR and the Agriculture for Nutrition and Health Network).

E. Collaboration with other Rome-based agencies

64. FAO is already a strategic partner in Viet Nam. Collaboration with FAO enables IFAD to leverage high-level technical expertise to support its projects or for policy engagement. FAO co-chairs the United Nations Results Group 3 on climate change and environment, in which IFAD participates, as part of the OSP implementation arrangements. There are clear complementarities between IFAD and FAO programmes, including on food and nutrition security, climate resilience and disaster risk management.¹²

F. Beneficiary engagement and transparency

65. **Beneficiary engagement.** Engagement with rural civil society is one of IFAD's trademarks. Over decades of engagement using bottom-up participatory approaches, IFAD has built a vast network of community-based organizations, linking them with local government agencies while enabling their voices and concerns to influence policies and programmes. For example, IFAD promoted the participatory, market oriented and climate-sensitive MOP-SEDP in 184 communes, which was scaled up to another 673 communes. This constant advocacy work has demonstrably influenced the evolution of public policies along with those of other financing agencies active in the agricultural and rural sectors.¹³ A participatory monitoring framework will be developed to strengthen feedback mechanisms and community ownership.
66. **Transparency.** A transparency and good governance framework will be designed to strengthen the portfolio against risks. It will provide access to project document; information on investments made and results achieved; access to audit and bidding reports; and assessment of results by external agencies. Project stakeholders (especially farmers and their organizations) will be directly involved in planning, implementation, monitoring and evaluation of project activities.

G. Programme management arrangement

67. The IFAD Sub-Regional Hub in Hanoi serves IFAD's Viet Nam operations. It includes a Country Director, programme officer, country programme officer and programme assistants for operations, monitoring and evaluation, knowledge management and

¹² The World Food Programme does not currently operate in Viet Nam.

¹³ This includes the IFAD grant funded support to strengthen farmers' organisations in the Asia and Pacific region.

policy engagement. This team is supported by a financial management team in order to promote the efficient flow of funds and control of expenditures. Together, these teams form the core of COSOP management, working closely with the Government and other partners.

H. Monitoring and evaluation

68. The current arrangements for COSOP monitoring will be extended with minor changes. The main improvements include the greater integration of project activities to build economies of scale in COSOP management. Capacities will be enhanced as needed to keep pace with increasing requirements. Given the evolving context in which IFAD's operations must be managed, special attention will be given to monitoring and assessing the economic returns on investment and spill-over effects.

VII. Risk management

69. The table below summarizes the main risks identified and the mitigation measures.

Table 2
Risks and mitigation measures

<i>Risks</i>	<i>Risk rating</i>	<i>Mitigation measures</i>
Political/governance	low	National policy context highly compatible with COSOP
Macroeconomic	low	
Sector strategies and policies	low	
Institutional capacity	medium	Grant mobilization to fund capacity-building and technical assistance
Portfolio	low	
Fiduciary (including corruption)	medium	Close project supervision and audit; capacity-building
Environment and climate	substantial	Most investments are geared at climate change adaptation and building resilience
Social	low	
Labour rights, working conditions and child labour	medium to high	Review and update all current farm and enterprise contracts in compliance with national laws and international treaties on decent work conditions. Join ILO in advocating for decent employment and zero tolerance for child labour.
Sexual harassment and sexual exploitation and abuse	medium	Communicate IFAD's zero tolerance among project participants including the Government, staff and partners.
Grants funds cannot be obtained in the required timeframe, quantity and type	medium	IFAD and the Ministry of Planning and Investment will work in a pro-active manner to attract local and international grant financing.
Overall	medium-low	

COSOP results management framework

Country Strategy alignment	Related UNDAF Outcome	Key results for COSOP				
		Strategic objectives	Lending and Non-Lending Activities (2019-2025)	Outcome indicators	Milestone indicators	
Restructuring the agricultural sector: SMART agriculture Improved productivity, competitiveness and value added Maintaining a sustainable pace of growth Rapid improvement of incomes and productivity of rural people A climate resilient and low carbon emitting economy Youth development and employment	One Strategic Plan 2017-21 SDG 1 SDG 5 SDG 13 Focus Area 1: Investing in people	SO1: Build pro-poor and stable value chains leveraging significant investments from the private sector	Lending/investment VC infrastructure Infrastructure: last mile roads infrastructure, processing & storage facilities Non-lending/non-project Smart agriculture and climate adapted practices Nutrition smart VC Food safety Farmer organization development Youth vocational training Business development services Technical Assistance Policy engagement: VC governance & contract farming Testing innovations in VC Knowledge management	200 Partner SMEs and firms increase their investments in pro-poor value chains by at least 100% 35 000 farming households (>40% poor) reporting an increase in value of sales > 25% income increase for smallholder producers from targeted value chain 13 000 decent jobs created (full time equivalent) for women, men and youth	250 rural enterprises accessing business development services 38000 rural producers accessing production inputs and/or technological packages 3000 contracts between rural producers' organizations and private companies 450 kilometers of roads constructed, rehabilitated or upgraded 300 markets, processing or storage facilities constructed or rehabilitated	
	SDG 1 SDG 5 Focus area 1 Investing in people		SO2: Enhance and expand financial inclusion for climate resilient rural livelihoods;	Lending/investment <i>Note: Lending to MFI/PFI is currently not possible</i> Non-lending/non-project Partnerships with SBV: Designing and testing innovative financial products. Policy engagement: Support to MF strategy and policy development. Networking on microfinance - SSTC Support to WDF: registration as MFI; capacity/skills development - APRACA / SSTC grants	30000 MFI clients increasing their incomes by at least 30% 5 registered WDF by SBV 100 % of WDF/MFI with portfolio at risk < 5 % (> 30days) National Comprehensive Financial Services Strategy adopts IFAD experiences	40000 men/women in rural areas accessing financial services (savings, credit, insurance, remittances, etc.) 40000 rural women/men trained in financial literacy 40000 MFIs clients (men/women) receiving training on climate smart agriculture training Assessment of WDF performance published
	SDG 1		SO 3: Foster the environmental	Lending/investment	20000 EM men / women adopt climate smart	30000 hectares of land brought under climate-
NTP-CCR & Green Growth						

1

<p>Strategy: Low carbon emitting industries, climate resilience and clean environment</p> <p>Protection of biological resources</p>	<p>SDG 2</p> <p>SDG 5</p> <p>SDG 13</p> <p><i>Focus Area 2: Ensuring climate resilience and environmental sustainability</i></p>	<p>sustainability & climate resilience of ethnic minorities' small holder economic activities.</p>	<p>Development of new sustainable, climate resilient pathways for poor rural people and smallholder farmers</p> <p><i>Non-lending/non-project</i></p> <p>Nutrition tools Climate adaptation tools</p> <p>Market: Commune/One Commodity (OCOP)</p> <p>Agro-tourism Technical assistance SSTC Policy Engagement</p>	<p>sustainable technologies</p> <p>30% Income increase among EM families</p> <p>30% Reduction in poverty among EM</p> <p>70% Women reporting improved diet quality</p>	<p>resilient management</p> <p>40000 EM men/women trained on climate smart, natural resources management practices</p> <p>Number of EM men and women trained on nutrition</p> <p>300 Km of last mile roads, markets and storage in EM areas</p> <p>50 Tourism facilities established</p>
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Transition scenarios

Economic and social transformation in Viet Nam: patterns and challenges

1. Viet Nam's economy is performing well, propelled by the sustained global recovery and continued domestic reforms. Robust growth is boosting job creation and income growth, leading to broad-based welfare gains and poverty reduction. Viet Nam's gross domestic product (GDP) is estimated to have increased by 7.1 percent in 2018. GDP growth was broad-based, led by strong industrial growth of 8.9 percent, bolstered by the strong external demand in the manufacturing and processing sectors. Agriculture output growth also accelerated to 3.8 percent largely due to strong performance in the export-oriented fishery subsector. Meanwhile, expansion of the service sector remained robust at 7.0 percent underpinned by strong underlying retail sector growth supported by buoyant private consumption and record tourist arrivals (source EIU, World Bank).
2. Between 2014 and 2016 alone, the booming export sector and rising domestic demand from the emerging consumer class helped create more than 3 million jobs. Nearly 80 percent of these were in the manufacturing, construction, retail and hospitality sectors, which absorbed a net outflow of 2 million workers out of agriculture. This marks a turning point in Viet Nam's structural transformation, as employment in agriculture has started shrinking in absolute as well as relative terms, accompanied by rapid growth in wage employment in all sectors. Robust labor demand over this period boosted average monthly wages in the private sector by a cumulative 14 percent. Households in Viet Nam are therefore increasingly wage dependent. About 54 percent obtained most of their income from wages in 2016. Also, two in five people now have a paid job. The rise in wage incomes contributed to more than half of the decline in poverty during 2014-16 and 40 percent of the increase in the share of people attaining economic security (World Bank, 2018).
3. Viet Nam is experiencing rapid demographic and social change too. After years of growth, Viet Nam's population reached about 95 million in 2017 (up from about 60 million in 1986) and is expected to expand to 120 million before tailing off around 2050. Currently, 70 percent of the population is under 35 years of age and there is an emerging middle class—currently accounting for 13 percent of the population but expected to reach 26 percent by 2026. Over the last thirty years, the provision of basic services has significantly improved while gender gaps are narrowing and access to household infrastructure has improved dramatically
4. The success in reducing poverty has come largely from rapid economic growth that created more and better jobs and from rising wages. Government investments have significantly improved service delivery, education, and public infrastructure, which facilitated growth and enabled broad participation in the economy. The transformation from an agrarian economy to a labor-intensive manufacturing and services industries has been key, where these sectors created 15 million jobs over the past 20 years (ibid). Improved education has been an important pathway to obtaining better jobs. Migration to cities presented rural households with nonfarm opportunities. These factors have contributed to households diversifying their income sources from agriculture. Those earning a higher share of income from non-agriculture enterprises and non-agriculture wages are more likely to be non-poor.
5. The agricultural and rural sectors have enjoyed significant growth. In the ten-year period between 2008 and 2017, the absolute contribution to GDP by agriculture, forestry and fisheries grew by 70%, from USD 20.2 billion to USD 34.3 billion (current dollars). In contrast, the relative contribution of agriculture to GDP has been constantly decreasing from 25% in year 2000 to 15% in 2018, reflecting a deep transformation of Viet Nam's economy.
6. Growth in the sector has however been heavily subsidized by unsustainable exploitation of soil, water and forest resources and the degradation and loss of the

ecological services that they provide. Cheap labour and the overuse of fertilizers, pesticides and herbicides have also underlain the “successful” expansion and intensification of agricultural production. This model has no real future : (i) land, labour, and capital are quickly shifting to other, more profitable, non-agriculture sectors; (ii) the overuse of inputs is increasing production cost and reducing farmers’ profits; (iii) urban consumers concerns are growing as regards food safety and market pressure increasing on producers to change their production practices; and (iv) over allocation of surface water and mining of groundwater is leading to real water scarcity for irrigation, especially throughout central Viet Nam, at the same time that government seeks to expand irrigated areas. These practices have had serious impacts in terms of biodiversity loss, natural resources degradation, and environmental pollution and contamination.

7. Making its transition to a higher value economy, Viet Nam is facing the challenge of producing jobs for its young and expanding labour force and providing it with relevant skills for the growing service and manufacturing sectors. While industrialization is developing, agriculture remains nevertheless the dominant sector of employment creation in Viet Nam.
8. Overall, Viet Nam appears to be at risk to be a victim of its own success as it outgrows its current market and natural resource management institutions and governance. This appears to be the main obstacle to sustained agricultural growth socially, economically and environmentally in the next five years and beyond. The recent deceleration of the economic growth rate testifies to it. Efforts to stimulate the economy through tax breaks and accommodative monetary policy have faced diminishing returns, while raising fiscal deficits and creating new contingent liabilities. Without accelerating structural reforms, especially in the banking and State owned enterprise (SOE) sectors, Viet Nam faces the risk of a prolonged period of slow growth.

Table 1: Key indicators (2018-2023)

Case	2018	2019	2020	2021	2022	2023
Real GDP growth (2019-23)	7.1	6.9	6.2	6.1	6.4	6.8
Gross agricultural production growth	3.8	2.8	2.6	2.8	2.7	2.6
Consumer price inflation (av. %)	3.5	3.0	3.0	3.5	3.8	3.9
Government balance (% GDP)	-6.5	-6.5	-6.3	-6.2	-6.0	-5.6
Current-account balance (% GDP)	1.9	1.1	1.0	1.7	1.9	2.2
Money market rate	3.9	4.6	4.7	4.9	5.0	5.2
Inward direct investment (% GDP)	6.2	6.1	5.5	5.9	6.0	5.5
Unemployment rate (%)	3.4	3.3	3.3	3.5	3.4	3.1
External debt (% GDP)	47.6	43.2	39.5	37.9	37.3	35.8
Exchange rate D: US\$ (av.)	23,012	22,747	22,675	23,040	23,775	24,448
Rural population (mill.) – (FAO)	61,075	61,538	61,341	61,113	60,856	60,573
Urban population (mill.) – (FAO)	33,991	34,857	35,716	36,567	37,408	38,238
Business environment ranking (EIU)	Global (out of 82 countries) : forecast to improve from 58 during 2014-18 to 53 during 2019-23. Regional (out of 17 countries): forecast to improve from 12 during 2014-18 to 10 during 2019-					

	23
Investment Climate for Rural Business (EIU, RSPA)	Moderately unsatisfactory: (i) probability of a failure in infrastructure investments is rated as moderate but with very high impact; (ii) there is no program in Viet Nam that specifically focuses on rural entrepreneurship, although support to rural entrepreneurship has happened through dedicated projects; (iii) gross capital formation in agriculture is below standard compared to other similar countries .
Vulnerability to shocks	<p><i>Climate change:</i> Viet Nam is highly vulnerable to climatic shocks, in particular floods and droughts. Probability medium, moderate impact.</p> <p><i>Food price shock:</i> Viet Nam remains a net rice exporter and is bound to benefit from an international shock to the rice market. Negative impact of such shock on poor households can be mitigated provided domestic price is stabilized (low probability, low impact)</p> <p><i>Political risk:</i> Territorial disputes in the South China Sea lead to an outbreak of hostilities: low probability with very high impact</p>

Scenarios

9. The base case scenario is one where global and regional drivers of agricultural transformation continue to shape its patterns and outcomes. In this scenario, which is also the most likely one, Viet Nam's medium-term outlook further improves. According to World Bank's sources, Real GDP was projected to expand by 6.8 percent in 2018 before moderating to 6.6 percent in 2019 and 6.5 percent in 2020 due to the envisaged cyclical moderation of global demand. Despite reduced slack in the economy, inflation is expected to remain around the 4 percent government target, predicated on some tightening of the monetary stance to counter price pressures emanating from domestic input price pressures and rising global commodity prices. On the external front, the current account balance is projected to remain in surplus, but start narrowing from 2019, reflecting widening deficits on the income and services accounts. Fiscal consolidation is expected to contain public debt over the projection period. The budget deficit will be smoothed by increased tax revenues, thanks to the implementation of the tax administration system, and by receipts from the privatisation of State-Owned Enterprises. Overall public debt will slightly decrease, remaining just below the ceiling set by Parliament (65% of GDP).
10. As uncertainties generated by the threats of global trade war increase, these in turn may lead to an acceleration of regional integration and increased attention to domestic markets too. Evolving consumer demand will continue to shape the offer of agricultural product both on the domestic and international markets. Increased pressure on the natural resource base are amplified by climate change effects while incentives made available to help transform smallholder agriculture systems remain inadequate to better adapt to climate change and participate in higher value commodity markets. Digital and precision technologies remain accessible only to better off households and larger farms. The level of price volatility will depend on the combined effect of geopolitical, climate and policy factors.
11. Reflecting the overall development trends in Viet Nam, the financial sector has gone through a period of major transformation during the past 20 years. Commercial banks dominate the sector, with 96% share of total assets. However, the commercial banks still tend to prefer lending to large, urban and known borrowers at the expense of rural clients and small and medium enterprises (SMEs). Both farmers and agri-companies will continue to experience the lack of adequate and appropriate financial services as a key constraint for expansion and diversification.
12. For the 2021 to 2025 period, the government intends to continue with the ARP as a priority program and facilitate the implementation of a series of strategic policy changes, including allowing the continued reduction in paddy land and its conversion to other, more profitable, crops; simplifying administrative procedures to promote export, and provide various incentives to investors in agriculture.

13. However, challenges remain. Despite all government's determination, the average annual growth rate of the sector remains below the 3.0% target and ARP implementation was strong and synchronized in some provinces while it was slow in others. The practice of unsustainable use of natural resources to subsidize development remains. The needed breakthrough policies for mobilizing resources (land, capital, and technology) to support the ARP are still missing and institution transformation has been very slow. Structurally, the agriculture sector continues with smallholder farms as the main production unit, and micro- and small enterprises as the main players in the agricultural commodity supply chains. Nor has the rapid development of infrastructure and manufacturing appeared to be expediting the development and transformation of agriculture.
14. In a high case scenario, growth remains robust carried by the continuous shift of labour from agriculture to sectors with higher productivity (manufacturing and services). While public investment is subject to budget constraints, private investments will be dynamic. Domestic demand will be strong supported by tourism, the growing middle class, increasing wages, and rising urbanisation rates. Exports are expected to continue to perform strongly, with increasing participation international trade agreements (ASEAN, the FTA with the EU, the FTA with South Korea and the CPTPP).
15. Participation of smallholder households in stable, pro-poor value chains is expected to increase their income, while new value chains will reflect a shift from short-term, supply chain relationships to longer-term, equitable relationships between producers, lead enterprises/agencies and wholesalers/retailers. Smallholder inclusion in sustainable value chains would involve working with lead companies with both major, strategic pro-poor value chains and smaller niche value chains which have or plan to have significant reliance on smallholder contracts to obtain their supply, and that plan for large increases in the number of new smallholder contracts. In cooperation with the company or companies, farmer groups (either existing or organized into cooperatives or CIGs) that can meet minimum cultivated area requirements would be supported to enter into contracts with the companies and become a part of a stable supply chain. At all levels of key value chains, innovative and effective financial service products will be developed during the next 5 – 10 years.
16. The lower case scenario is represented by an evolution by which a slowdown of China's growth combined with extreme weather events. The regional economic slowdown could result in a reduced flows of Foreign Direct Investments needed to finance infrastructure projects within public-private partnerships frameworks. This would affect more particularly the transport and energy sectors , and only marginally the agricultural and rural sector. In the past, agriculture has played an important buffer role in mitigating the effect of regional and global crises. In consideration of this fact, a slow down may actually play in favour of rural and agriculture development, as Government is likely to protect poverty-oriented projects and stimulate domestic growth through projects.
17. The agricultural productivity and poverty alleviation gains could be seriously jeopardised by risks of extreme weather events (storms, typhoons, flooding, and drought), and by slow climate change impacts from sea level rise and warming temperatures (Cf Annex IV: Social, Environmental and Climate Assessment Procedures (SECAP) analysis). In the absence of adaptation measures, yields will likely be reduced for rice, maize, cassava, sugarcane, coffee, and vegetables. Impacts are predicted to be more significant under dry scenarios than wet ones. Hydrologic changes and sea level rise will affect the availability of fresh water or even physically change the agricultural landscape. Climate change may also threaten the growth and reproduction of livestock and increase the incidence and spread of diseases

18. The net impact of such scenario will depend on the ability of national policies and plans to reduce smallholder exposure to such risks implies, to ensure good environmental management at several levels and scales, to protect biological resources, to diversify out of rice and to invest in climate resilient infrastructures and practices.

Rationale of IFAD's engagement in inclusive and sustainable rural transformation

19. Rapid urbanisation and industrialization have had multiple impacts on rural transformation. New challenges have emerged including meeting quality standards to access export markets, strengthening capacity to manage water pollution and waste, developing more effective plans for adaptation and mitigation of climate change, and setting aside land for production in light of population and urbanisation pressure.
20. While poverty incidence is rapidly decreasing, its patterns are more than ever before associated with the rural populations in general, and ethnic minorities in particular. The remote, mountainous areas are where the poor are concentrated, and these are heavily populated by ethnic minorities. In no small part, this is due to the rural poor being largely dependent upon agricultural livelihoods and thus vulnerable to natural disasters, weather and/or climate risks, crop pest and disease outbreaks.
21. The new IFAD's strategy of engagement will directly contribute to Viet Nam's Agricultural Restructuring Plan. To this effect, it will operate several shifts in perspective to facilitate the transition and transformation of the Viet Nameese economy outlined in national strategies, and specifically:
- From a push (focus on output) to a pull strategy (value added and marketing)
 - From creating direct agricultural employment to creating rural employment both on farm and off farm
 - From fragmented value chains to integrated and digitalized value chains
 - From reducing exposure to climate change and environmental risks to adapting to CC constraints (mitigation)
 - From a priority to productivity and production increase to more quality and stability of this production
22. The COSOP embraces a people-centric strategy targeted to smallholders and agri-SMEs in underserved areas with a concentration of ethnic minorities. At the institutional level, the new programme targets Micro-Finance Institutions with reference to Women Development Funds. In order to keep the pace with the transformation of the national economy and of its rural sector, the targeting strategy innovates significantly in terms of approach and modalities while maintaining the focus on inclusiveness, facilitating the participation of the youth and women. This proposed targeting strategy will fit with the programmatic approach that will be adopted by this COSOP, in contrast with the project by project approach that characterized the previous one. The range of provinces eligible for IFAD support will be expanded, while in each participating province the support itself will become more focused.
23. Specifically, the COSOP will contribute to – and invest in - a more balanced regional development to bridge the gap between least advanced provinces and the rest of the country (financing, innovations, support to public development agencies, job creation). It will also take better into account the major climate change constraint by reinforcing agriculture adaptation/mitigation efforts (soil and water conservation, water management, agricultural insurance), particularly in most vulnerable mountainous areas). It will explore new solutions and ways to make of technical

innovations, and digital technologies in particular, a game changer for Viet Nameese small farmers and orient accordingly its investments in skill development, water saving, access and connection to markets and financing, rational natural resource management, clustering production for better visibility and penetration on the market.

24. Admittedly, the “smart” agriculture/Industry 4.0 agenda is not readily accessible individual smallholder household nor necessarily relevant to their circumstances. Working with individual small farmers on adopting such technology, would necessarily be limited in scale, have strong adaptive research/piloting elements, require working with farmers with stable access to markets and credit, require getting groups of farmers with contiguous land holdings together to share either a land-based system (scales of 4-5 ha) or greenhouse-based systems, and be technical assistance and training intensive. –There might be in fact more scope for engaging in this domain by working at the scale of irrigation schemes to introduce the soil moisture sensors and weather stations at a larger-scale to benefit the water users in the scheme and sharpen overall water management. Peri-urban smallholder farming engaged in high value and short supply chains could present another opportunity to investigate during this COSOP. In all cases, exploring the opportunities for smallholder farming adoption of high tech approaches will require to satisfy the needs for equipment, credit, technical assistance and training.
25. The agricultural dimension of the COSOP strategy is part and parcel of a wider vision of rural development. Far from being circumscribed to agricultural development, rural development will be aimed at supporting income generating activities and facilitating diversification out of agriculture when necessary and possible. The COSOP will also aim at adding value in pro-poor value chains with a more equitable distribution of the value added between value chain players through skill development of farmers, higher integration of value chains with less intermediaries, contract farming and contract programmes, incentives for the establishment and modernisation of the agricultural processing plans, building on:
- the incentives offered by the policy framework
 - the private sector own expansion plans
 - a higher quality facilitation of inter-professional collaboration and integration within the value chain
 - Better risk insurance coverage (both health insurance for ag. Workers and farmers, and agricultural insurance against extreme weather events and disasters)
26. Smallholder agriculture modernisation and diversification also require increased investments at the rural household level, hence the need for a deeper inclusion of low-income households into the financial market on a sustainable basis. In Viet Nam, this means :
- a financial graduation process through which the smallholders progressively move away from subsidised financing schemes to increasingly market-based and more sophisticated financing arrangements, receiving at the same time facilitation support to successfully engage themselves in more modern and diversified rural production, processing and trading activities.
 - support to market-based microfinance development which can be sustainable only if integrated to rural and agricultural finance institutions;
 - A core partnership is established to upgrade the country’s rural and agricultural finance institutional infrastructure to the standards required by agricultural transformation.

Agricultural and rural sector issues

Priority Areas	Affected group	Major issues	Actions needed
Poverty increasingly concentrated in rural areas & among ethnic minorities	Smallholder farmers, particularly poor and ethnic minority households, women, and landless	<ul style="list-style-type: none"> • Strong inequalities between ethnic groups persists (almost 45% ethnic minorities in poverty; 15% of population & 70% of poor). • Economic growth increasing gap between ethnic minorities & Kinh/Hoa peoples. • Poverty highly concentrated in the uplands (Northern Mountains, upland areas of the North & Central Coast, & Central Highlands). • Ethnic minority households most vulnerable to falling into a lower economic class 	<ul style="list-style-type: none"> • Effective, participatory processes with target groups to define local opportunities, priorities, and targeted livelihood support measures to improve livelihoods & reduce poverty. • Extend Women's Development Fund services to target communities & establish Women's Savings & Credit Groups (SCGs) for micro-credit. • Complement National Target Program for Sustainable Rural Development (NTP-SRD) with productive infrastructure finance & leverage NTP-SRD funds for planning, organization & capacity building to implement agreed livelihood support measures through GoV One Commune, One Product (OCOP) strategy. • Obtain non-loan resources to provide high level technical assistance & business development services to assist in capacity building, development of business plans, marketing, & access to finance through private sector and/or commercial banks
Agricultural sector characterized by low smallholder profitability	Smallholder farmers, poor & ethnic minority households, and women, and their communities.	<ul style="list-style-type: none"> • Landholdings small and fragmented • Lack access to credit commensurate with needs for upgrading/improving production systems • Limited post-harvest facilities • Low value addition • Outdated, inefficient irrigation infrastructure • Weak linkages to markets & market information, limited integration into value chains • Lack access to technology & quality technical services 	<ul style="list-style-type: none"> • Promote/support farmer organization to consolidate blocks of land for production of higher value commodities (national and/or regional strategic value chain commodities). • Obtain non-loan resources (i) to provide business development support services to farmer groups & assist in capacity building; marketing, & access to finance through private sector and/or commercial banks; (ii) for high end technical assistance for design, capacity building, training, technology transfer, & operations of post-harvest facilities, compliance with food safety, traceability & quality standards; and (iii) for policy engagement and dialogue in support of GoV's in addressing constraints and upscaling successful models and approaches • Develop/facilitate PPPs with large national companies to increase number of smallholder groups within their established value chains to supply fresh produce to companies' supermarket and/or other retail/wholesale/export operations. • Support consolidation of existing and/or emerging, short commodity supply chains with (or potential for) high smallholder inclusion, & high market & poverty reduction potential into value chains of regional or provincial importance. • Develop/facilitate PPPs with local SMEs (lead firms) for consolidation of value chains of regional or provincial importance. • Complement National Target Program for New Rural Development (NTP-NRD) with productive infrastructure finance & leverage NTP-NRD funds for planning, organization & capacity building to support organization, production, and post-harvest to support GoV's Agriculture Restructuring Program.

Agricultural enterprises (SMEs) – traders, processors, coops, business households) small & low capacity	Small and medium agribusiness-related enterprises and lead firms interested in sourcing fresh produce & ag commodities from and/or investing in poor regions & smallholder communities	<ul style="list-style-type: none"> • Lack access to credit, technology, & market-information to grow their businesses & increase added value to local products • Lack of capacity to formulate viable business/ investment plans & of business development services providers to support & assist SMEs • Commercial lenders lack of knowledge of SMEs & preference for lending to large & known borrowers. 	<p>Obtain non-loan resources:</p> <ul style="list-style-type: none"> • to provide business development support services (BDS) to SMEs for capacity building, marketing and distribution technology, & facilitation of access to finance through private sector and/or commercial banks (e.g. for formulation of business development plans) • to provide technical assistance, support, & market access for innovative, agritech SMEs & start-ups to sell service package to provinces and government programs (for NTPs, OCOP, others), to ODA & NGO projects, to private companies, etc. • for networking amongst agricultural sector BDS providers & with agribusiness accelerators (e.g., Mekong AgriTech Challenge) & others who work on VC promotion & development (e.g., NGOs, Our Farm or <i>Ruộng Nhà Minh</i>) • to promote/facilitate collaboration between provinces on implementation of NTP-NRD, NTP-SRD, & OCOP for value chain development, PPPs & livelihoods/poverty reduction for poor, ethnic groups and communities.
Unsustainable exploitation of land, soil and water resources for agricultural production	Smallholder farmers, poor & ethnic minority households, their communities, and those downstream.	<ul style="list-style-type: none"> • Intensive utilization of agricultural & forest lands • Low productivity offset by intensive use of fertilizers, pesticides, water, & antibiotics in aquaculture; fertilizer application rates 2x other SE Asia countries. • Surface & groundwater resources increasingly strained; water allocation conflicts for irrigation increasing. • Degradation of water quality from non-point source pollution (e.g., erosion, agro-chemical runoff) • Significant potential for poor land & agrochemical management practices to generate off-site impacts at scale from concentrated commodity production areas (e.g., coffee & pepper in Central Highlands) • Two-thirds of country mountainous & hillside cultivation widely practiced without application of soil & moisture conservation technologies & practices • Degradation of lands & soils from poor agronomic practices impacting crop health, yield and productivity. 	<ul style="list-style-type: none"> • Promotion of compliance with VietGAP¹⁴, GlobalGAP, and/or other voluntary standards in crop production/livestock/aquaculture, accompanied with training and extension assistance to meet these standards. • Support the inclusion of smallholders in established value chains of large, national wholesale/retail/export companies whose farmer' contracts mandate compliance with GAP standards, and that provide TA & extension services to their contract farmers to meet these standards. • Promote natural, sustainable farming practices, such as, use of locally available or produced organic inputs¹⁵, improved cultural practices¹⁶, and IPM practices¹⁷ where such exist and are proven effective • Take advantage of local opportunities where organic produce may have a differentiated market (e.g., where tourism has generated a local hospitality sector). • Obtain non-loan resources to provide high level technical assistance to assist in capacity building & technical support to provincial technical service providers (government, non-government, private) on GAP & food safety practices, & sustainable farming systems for supported commodities; systematization & dissemination of GAP & food safety practices for supported commodities; and research and development to strengthen GAP practices & sustainable farming systems for supported commodities. • See "<i>Agricultural sector & rural poverty alleviation efforts/ gains jeopardised by extreme weather events, exacerbated by climate change</i>" (below)

¹⁴ Good agricultural practices (GAP) codes, standards and regulations are guidelines which have been developed in recent years by the food industry, producers' organizations, governments and NGOs, aiming to codify agricultural practices at farm level for a range of commodities. Good agricultural practices are "practices that address environmental, economic and social sustainability for on-farm processes, and result in safe and quality food and non-food agricultural products" (FAO 2003).

¹⁵ For example, crop residue management, green manure crops, farmyard manures, recycling of wastes between production systems (e.g., shrimp/rice), compost, biochar, *bokashi*.

<p>Agricultural sector & rural poverty alleviation efforts/ gains jeopardised by extreme weather events, exacerbated by climate change.</p>	<p>Smallholder farmers, poor & ethnic minority households, and women</p>	<ul style="list-style-type: none"> • Viet Nam extremely hazard-prone w/ high frequency of floods, typhoons, cyclones, flash floods, and drought. • High year-to-year variation in rainfall equates to floods in rainy seasons & drought in dry seasons. • Drought and floods are equally predicted to become more frequent and severe. • Very large increase in number of hot days predicted by end of century • Very strong typhoons becoming more prevalent, typhoon season ending later, and occurrence in the southern regions increasing. • Sea level rise and subsidence pose severe threat to Mekong Delta • Rural poor highly vulnerable as tend to live in areas vulnerable to flooding and other natural disasters; have higher dependence upon agriculture and the natural resources base for their livelihoods and well-being; have fewer resources to recover from natural disaster impacts. 	<ul style="list-style-type: none"> • Reduce climate vulnerability of smallholders & rural poor through market-led, climate adapted agricultural and rural value chains • Mainstream climate change adaptation & natural disaster avoidance/mitigation in design and finance of value chain, livelihood & infrastructure investments. • Introduce “climate-smart credit” approaches into on-lending: integrate climate change adaptation into rural finance & incorporate climate risk into loan portfolios, incentivize adoption of climate-smart farming practices by smallholders. • Promote climate smart agricultural systems in targeted commodities • Capital investment in key value chain infrastructure to enhance sustainability (e.g., water conserving irrigation) • Obtain non-loan resources to provide high level technical assistance for (i) systematization & dissemination of climate smart agricultural practices for supported commodities; (ii) development of climate scoring & climate-smart credit systems for on-lending; (iii) studies, knowledge management processes, technical quality control, institutional capacity building, training, and extension to complement and expand upon public budget for technical assistance & extension (NTP-NRD, NTD-SPR); (iv) management of weather and climate risk throughout the value chain, food safety/traceability and compliance with quality standards; and (v) policy engagement and dialogue to support GoVN in addressing constraints and upscaling successful, climate resilient models and approaches.
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¹⁶ For example, halting of burning for land clearance and/or of crop residues, minimum tillage, soil and moisture conservation practices.

¹⁷ For example, for rice stemborer and brown rice hopper.

SECAP background study

Executive Summary

Objectives

The aim of this social, environmental, and climate preparatory study is to provide the analytical underpinnings for addressing environmental sustainability concerns by offering strategic options and input to the RB-COSOP/CSN development and decision-making process. This study is not intended to substitute for project-specific environment, social and climate assessments, but rather to reduce the need and limit the scope of the latter, and thus provide a framework for sustainable and coordinated development.

The development of this report was informed by a two-stage process: first, analytical studies that identified relevant areas for attention (screening), and secondly a SECAP preparatory study. The screening exercise was initiated in early 2018 in the form of a series of three studies (attached with COSOP package) that provided the overall assessments, from which priority issues to be addressed in the SECAP preparatory study were identified. Subsequently, between the dates of 17 September and 2 October 2018, a team of two specialists conducted the field portion of the SECAP preparatory study. Prior to the field portion, a comprehensive review of key documents was carried out. During the field portion, a wide array of consultations were held with key stakeholders at national and provincial-levels, the latter as part of two regional workshops conducted in Thai Nguyen and Da Nang provinces. Following the field portion, a further literature review was carried out to inform the issues and their further analysis within the SECAP preparatory report.

Potential, significant effects of proposed interventions

The COSOP is targeted to smallholders and small and medium, agricultural enterprises in underserved areas; often areas where ethnic minorities are concentrated. It emphasizes targeted support to the Government's "smart" agriculture agenda through climate-smart, inclusive value chain development. The primary investments identified in the COSOP are in value chain development. The strategic focus to achieve this would include (i) scaling up farmer organizations to meet or exceed the minimum cultivated area requirements for achieving production volumes that give market access and leverage; (ii) technical assistance and extension; (iii) climate-smart agricultural inputs (physical and financial); (iv) capital investment in key value chain infrastructure and technology (e.g., post-harvest, primary processing, cold storage, market access; water conserving irrigation; other productive infrastructure); and (v) subject to an effective mobilization of complementary grants, high-level technical assistance to support the effective management of weather and climate risk at the levels of the smallholder production systems. A significant percentage of the allocated loan financing is expected to go for infrastructure that is targeted to support the selected value chains (to be identified in detailed project preparation, with the provinces) and that further enhances climate change adaptation and resilience objectives.

Given the agricultural commodities/value chain focus, the most significant risks would be those associated with agricultural intensification; agro-processing, infrastructure development, and the risks posed to those by natural disaster and other weathers risks, exacerbated by climate change. Within the country specific context, avoiding or mitigating these risks will require attention to the following key areas:

Agricultural intensification. Viet Nam's agricultural productivity is still relatively low, though this varies across commodities. Rice and coffee yields are quite good, however yields in other main crops exhibit low productivity (World Bank, 2018a). Some of the major factors contributing to the low yields, and which will have to be mitigated against, include: (i) **poor land use practices**, particularly the utilization of lands unsuited for the particular crop or production system; (ii) **low investment in technology**; (iii) **low labor productivity**; (iv) **land fragmentation and the small size of holdings**; and (v) **low water productivity** due to aged and thus non-productive irrigation infrastructure. In addition, the standard, technical response to low yields consists of the expansion of agricultural land and the intensive use of fertilizers, pesticides and water for crops, and antibiotic usage in aquaculture. These trends have resulted in Viet Nameese agriculture having a rather large and extensive environmental footprint, which needs immediate attention (e.g., to land use suitability; avoidance of incentivizing/supporting expansion into fragile areas and/or land use change out of forest; non-point source pollution; inappropriate use and disposal of pesticides on human and environmental health, soil fertility management; management, conservation and protection of water resources; etc.).

In addition to these concerns, there are additional ones particular to Viet Nam's smallholder agriculture. The main producers of agricultural products in Viet Nam are the smallholder farmers, which number some nine million households. Amongst them, upland and hillslope agriculture are more often the norm and significant areas are dedicated to upland annual cropping, resulting in highly accelerated soil erosion with all the attendant issues this causes (soil degradation, loss of productivity and yield reductions, sedimentation and degraded water quality, hydrologic modifications, etc.). Even though terracing is common for some crops (e.g., irrigated, upland rice), for most crops (e.g., maize, cassava) it is not practiced, nor are other soil and moisture conservation practices common or widely used in hillslope agriculture (e.g., contour cultivation, reduced tillage, mulching, crop residue management, vegetative or constructed contour barriers, etc.). In some parts of the country shifting farming is also practiced by relatively small numbers of ethnic minorities (e.g., Raglai communities in the uplands of the Central Coastal Region).

Agro-processing. The primary concerns with the types of small-scale and geographically dispersed agro-processing that would potentially be supported, are general concerns revolving around the waste effluents they produce (some more than others) and how these are disposed of in the form of effluent discharges, air emissions or as solid wastes. Effluents flow into surface watercourses and seep into groundwater; emission gases are released into the atmosphere; and solid wastes are disposed of in an *ad hoc* fashion. These wastes can include a wide range of gaseous, solid and liquid compounds, ranging from water vapor to toxic materials and they can pose a serious threat to groundwater supplies, air quality, aquatic ecosystems, and ultimately to human health. When considering either expansion of existing facilities or the establishment of new ones, there could be impacts on biophysical resources including forest loss and soil erosion. Of these, experience from prior IFAD investments in Viet Nam suggest that the principal concerns arise with treatment and disposal of contaminated wastewater and solid wastes/residues generated through agro-processing related activities.

Examples of potential risks include: livestock/aquaculture – carcass waste disposal; odor management; manure; water for cleaning/processing and effluent disposal into surface water; disinfectant leaching; worker health and safety standards; vegetable processing (including cassava) – water for washing and disinfectants and effluent discharge into surface water; emissions; noise; contamination; freezing facilities – freon; worker safety; oil seed processing (including soy, maize) – heat; water for

cleaning/processing and effluent into surface water; grain milling – dust; noise; safety and health.

Infrastructure. The principal concerns with the types of small-to-medium scale infrastructure that would potentially be supported are those related to land use change/deforestation (direct or induced); erosion and sedimentation; and impacts on water resources. Examples of potential risk include: road construction (new, upgrading, rehabilitation): increased risk of landslides, increased soil loss and sedimentation, and increased rates of land use change/deforestation; irrigation and drainage: alteration/destruction of habitat and fragile areas, increased soil loss and degradation, surface and groundwater contamination, and over extraction of surface and groundwater; and water supply systems: wastewater disposal and water pollution.

Natural disasters and climate change. Viet Nam is one of the most disaster and natural hazard-prone countries in the East Asia and Pacific region, with droughts, severe storms, and flooding causing substantial economic and human losses. Intense rainfall associated with typhoons frequently causes immense destruction in heavily populated coastal areas as well as in the Red River and Mekong deltas, the country's major rice-growing areas. These deltas are also vulnerable to flooding caused by heavy monsoon rainfall. High year-to-year variation in rainfall across some regions of the country means that some areas that experience floods in rainy seasons can also experience drought in dry seasons. Floods are responsible for almost 70% of all reported deaths and 65% of economic losses. Germanwatch (Kreft et al, 2017) ranked Viet Nam 8th overall for long-term climate risk amongst the 10 countries most affected from 1996 to 2015. The ranking was based on mortality, economic impacts, and total number of events. Climate change is projected to increase the impact of disasters, especially the timing, frequency, severity, and intensity of hydro-meteorological events (Nguyen Tuan Anh, 2017). Given its high exposure to floods and storms, and the fact that two of its most important economic sectors – industry and agriculture – are in coastal lowlands and deltas – Viet Nam was listed by World Bank as one of the five countries that will be most-affected by climate change in 2010 (World Bank, 2018a).

In Viet Nam, both the agricultural sector and rural poverty alleviation efforts and gains are jeopardised by extreme weather events (storms, typhoons, flooding, and drought), and thus the climate change-exacerbated impacts emanate from, amongst others, sea level rise and salinization, and warming temperatures. Viet Nam has an admirable history of coping with natural disasters and reducing their effects, but the economic and human costs can still be significant. IFAD's target group – the poor – are more vulnerable to these shocks for a variety of reasons. They are more likely to live in areas vulnerable to flooding and other natural disasters, have higher dependence upon agriculture and the natural resources base for their livelihoods and well-being, and are less likely to live in well-constructed, permanent homes. Further, as the poor have fewer resources to recover, the impacts of flooding, storms or droughts is usually greater. Inability to pay off debt or take out new loans, increases in local food prices, and illness due to water-borne diseases can all disproportionately affect the poor. Women and men are also seen to be affected differently by climate change because of the different roles they play in the household economy. They have different resources with which to perform these roles, including different levels of education, access to power, social norms, access to credit, and ownership of land and other goods. Women are often playing the multiple roles of farming crops, as well as being primarily responsible for providing food, water and fuel for the family,

and caring for the sick. All these roles are made more onerous by the impacts of climate change.

Direct impacts on agricultural production and key crops will result from projected increases in temperature. In most regions, the number of days when temperatures exceed 25°C is expected to increase significantly, especially in the uplands (North and Central Highlands) while the number of days where temperatures drop below 20°C will decrease significantly. Water demand for agriculture could increase by as much as two or three-fold compared with that of 2000 (Abidoya et al. 2016). Shifts in eco-agricultural zones could also cause loss of varieties of indigenous breeds or species, although this may also extend the ranges of some crops. Moisture stress in crops will be exacerbated, and areas of crops requiring wet or moist conditions will likely decrease.

Rates of evapotranspiration will also increase, increasing crop water usage and the damaging effects of drought. Total output from spring rice crops is expected to decline more than that of summer crop outputs and significant production losses are expected in the three major grain crops. Winter maize productivity may increase in the Red River Delta but decrease in Central Coast and the Mekong River Delta. Yield changes will vary widely across crops and agro-ecological zones under climate change and estimates of these will also vary depending on assumptions about the impact of increased atmospheric CO₂ concentrations and rainfall. Overall, in the absence of adaptation measures, overall yields will likely be reduced for rice, maize, cassava, sugarcane, coffee, and vegetables. Impacts are predicted to be more significant under dry scenarios than wet ones. Hydrologic changes and sea level rise will affect the availability of fresh water or even physically change the agricultural landscape. Climate change may also threaten the growth and reproduction of livestock, and increase the incidence and spread of diseases.

A predicted 33 cm rise in sea level by 2050 would increase the area inundated by flooding to a depth greater than 0.5 m by an estimated 276 thousand ha and the area affected by saline intrusion would increase by 420 thousand ha. In result, an estimated 13% – 590,000 ha – of the nation's rice production area may be lost by 2050 (IMHEN and UNDP. 2015). Further yield impacts would result from early crop maturation and/or increased pest and disease pressures. The suitability of different post-harvest and crop storage practices may also be affected, increasing post-harvest losses.

Value addition of the SECAP preparatory study

The intended value added elements to be delivered by this SECAP preparatory study are to: (i) identify key linkages between rural poverty and the environment; (ii) provide key environmental and social opportunities and actions to influence IFAD support to Viet Nam's rural development efforts towards environmental and social sustainability and climate smart development; (iii) identify priority ENRM, social and CC issues based on IFAD's comparative advantage for policy dialogue with the Government; and (iv) identify an opportunity for GEF, GCF and/or ASAP interventions. The study provides, inter alia, an (i) updated assessment of environmental, social, economic, and institutional issues with a focus on agriculture and food security; (ii) identification of links with the other sector policies, strategies and plans; and (iii) provision of specific measures to optimize climate adaptation, environmental management, and resource use in the new RB-COSOP/CSN period (2019-25) for Viet Nam.

SECAP study recommendations

The key recommendations *viz.* natural resources management and climate change adaptation within the IFAD program areas include:

Rural financial services. Integrate climate change adaptation and natural disaster risk management concerns into rural finance through working with all actors in the proposed micro-finance institutions (MFI) financing chain to incorporate climate risk into their loan portfolios and incentivize the adoption of climate-smart farming practices by smallholders. This would largely focus on introducing “climate-smart credit” approaches into on-lending, at all levels (i.e., the refinancing facility, the MFIs, local group-level, and at the smallholder group level).

Climate adapted agricultural and rural value chains. It will be essential that climate change adaptation, and its expressions as weather risk and natural disasters, be mainstreamed into the design and finance of the interventions. In addition, because of the real and immediate concerns on over-use and abuse of agrochemicals, especially in the cultivation of major commercial commodities, the value chain programs will need to take advantage of existing, market-incentives for appropriate uptake of agricultural inputs by farmers. Specifically, these would include promotion of (in the case of value chain development) or mandating (in the case of smallholder inclusion in existing value chains) compliance with VietGap, Global Gap, and/or other voluntary standards in crop production/livestock/aquaculture, accompanied with training and extension assistance to meet these standards.

In those instances where the focal groups are marginalized smallholders and thus not immediately positioned to reap the benefits from the production of commercial commodities and participation in national and/or regional value chains, a focus on economic empowerment and climate resilience would be appropriate. Here, the production/livelihood would tend to be low input systems where risks of over-use and abuse of agrochemical inputs only become problematic to the extent that the activity becomes sufficiently profitable as to both allow and incentivize such behavior. However, in the first instance, the approach should be to promote natural, sustainable farming practices, i.e., use of locally available or produced organic inputs, improved cultural practices, and IPM practices where such exist and are proven effective (e.g., for rice stemborer and brown rice hopper) at the outset and take advantage of local opportunities where organic produce may have a differentiated market (e.g., where tourism has generated a local hospitality sector).

The approach for doing so would vary, depending upon focal area and the institutions involved, the markets for the value chain products, and the available sources of financing. The breadth, depth and intensity of the natural resources and climate change adaptation-oriented interventions will be dependent upon ability to obtain grant financing and/or leverage partnerships with other organizations (e.g., FAO, GIZ, JICA) for technical assistance, studies, knowledge management processes, technical quality control, institutional capacity building, training, and extension. In the absence of these, the approach would have to be capitalized upon the existing capacities within the participating private sector partners and government’s R&D and technical services/extension, with some modest hypothesis of the extent to which that could be improved and strengthened over the lifetime of the program to provide for enhanced outcomes.

Infrastructure. The strategic focus here must be on development of climate resilient infrastructure, which would need to depart from an identification and systematization of the tested and proven, existing approaches (e.g., as developed under the ADB-financed Viet Nam: Promoting Climate Resilient Rural Infrastructure

in the Northern Mountain Provinces) and, with GoV resources, the development of technical manuals (design, implementation) and guidelines. This must also include spatial planning to avoid, to the extent possible, the construction of infrastructure in areas prone to natural disaster risks (especially, flash flooding and landslides). Should additional non-lending resources be obtainable, complementary investments to enhance knowledge and capacity for design, construction and O&M for climate resilient infrastructure would be sought (e.g., for identification, testing and piloting of new technologies and/or systems; and provision of specialized technical assistance for design, implementation and supervision of CCA infrastructure construction).

Opportunities for climate change mitigation. Viet Nam's agricultural sector is a major contributor to GHG emissions. While the focus is on adaptation for smallholders and the value chains in which they participate, there will be opportunities as well for mitigation. Those would come primarily through: (i) rice systems – extension of SRI rice and assistance to farmers to move out of rice production into more profitable, value chain opportunities; with the latter possibly providing the greatest opportunity for reduced impacts; and (ii) agricultural soils and manure management (which go hand-in-hand) for improved fertility management (i.e., increasing organic inputs), reduced tillage, soil and moisture conservation, and biogas.

Payment for Forest Environmental Services. GoV's PES program is centrally driven, dominated by a strong state role in forest management that overrides any idea of a market-oriented approach and largely lacks enabling conditions to tackle key underlying causes for deforestation (e.g., uneven land tenure, lack of participation by local communities in conservation, weak and ambiguous land/forest rights, no structures for negotiation, and all disbursements decided by state). From a practical standpoint, it would be outside the scope of an IFAD program to develop payment of environmental services (PES) schemes with the ambition of achieving broader climate change and sustainable natural resources management objectives. The exception to this would be the successful establishment of a platform for climate smart lending, which would itself constitute a form of PES, in that farmers could be rewarded (through access to credit) for their contributions towards enhancing the resilience of the agricultural sector and food security.

SECAP Preparatory Study

The aim of this social, environmental, and climate preparatory study is to provide the analytical underpinnings for addressing environmental sustainability concerns by offering strategic options and input to the RB-COSOP/CSN development and decision-making process. This study is not intended to substitute for project-specific environment, social and climate assessments, but rather to reduce the need and limit the scope of the latter and thus provide a framework for sustainable and coordinated development.

Objectives of the SECAP Study

The objectives of the Social, Environmental and Climate Assessment Procedures (SECAP) study were to (i) identify key linkages between rural poverty and the environment; (ii) provide key environmental and social opportunities and actions to influence IFAD support to Viet Nam's rural development efforts towards environmental and social sustainability and climate smart development; (iii) identify priority ENRM, social and CC issues based on IFAD's comparative advantage for policy dialogue with the Government; and (iv) identify an opportunity for GEF, GCF and/or ASAP interventions. The study provides, *inter alia*, an (i) updated assessment of environmental, social, economic, and institutional issues with a focus on agriculture and food security; (ii) identification of links with the other sector policies,

strategies and plans; and (iii) provision of specific measures to optimize climate adaptation, environmental management, and resource use in the new RB-COSOP/CSN period (2019-2025) for Viet Nam.

Approach and Methodology Used

The development of this report was informed by a two-stage process: first, analytical studies that identified relevant areas for attention (screening), and secondly a SECAP preparatory study, as described below:

The screening exercise was initiated in early 2018 in the form of a series of three studies: (i) an external review of the IFAD-funded program in Viet Nam (IFAD, 2018b) that, among others, analyzed GoV's ethnic minority policies and programs and the effectiveness of certain social and climate change adaptation instruments financed by IFAD under the prior COSOP period; (ii) a review of agriculture and rural development issues and opportunities (IFAD, 2018a) that included macro-level social, environmental and climate change concerns; and (iii) an in-depth study of poverty, gender, ethnic minority issues and youth employment (Nguyen Ngoc Quang, 2018). In the course of the external review, broad consultations were held with relevant stakeholders in selected provinces (both inside and outside of the IFAD-funded program) – including Project Coordination Units (PCU), local banks, provincial agencies, value chain actors and business development services (BDS) providers – as well as with representatives of national agencies, National Target Programs, and ODA. A consultation workshop was also held in Hanoi, organized by the IFAD Country Office and the Ministry of Planning and Investment (MPI). These provided the overall assessments, from which issues to be addressed in the SECAP preparatory study were identified.

Subsequently, between the dates of 17 September and 2 October 2018 a team of two specialists¹⁸ conducted the field portion of the SECAP preparatory study. Prior to the field portion, a comprehensive review of key documents was carried out. During the field portion, a wide array of consultations were held with key stakeholders at national and provincial-levels, the latter in two regional workshops. Following the field portion, a further literature review was carried out to inform the issues and their discussion within the SECAP preparatory report.

Description of Meetings with Stakeholders

The consultants met with key stakeholders¹⁹ from government, private and finance sector, NGOs and mass/civil society organizations, and international cooperation at national and regional levels, where policies, priorities, programs and investments

¹⁸ Environment, Rural Poverty and Social Development Specialists, Mr. Jim Smyle and Mr. Nguyen Ngoc Quang.

¹⁹ In addition, the COSOP mission made a field visit to Bac Kan province and consulted with the PPC and its line agencies, the CPC of (Quang Thuan commune, Bach Thong district) and representatives from its village communities, as well as two rural SMEs. Also, for the purpose of the external review of the IFAD-funded program in Viet Nam, visits and consultations were held with: (i) Dak Nong Province: Farmer Union; Cooperative Association, Economic Opportunity Fund for Women –Women Union; VBARD; LienViet Bank; Tuy Duc District, selected enterprises, cooperatives, farmers in farmers-business linkage models; Đắk R'Lấp district, Office for Agriculture and Rural Development and selected VC firms and cooperatives; (ii) Lam Dong Province: selected agriculture companies in enterprise-farmer linkage; Di Linh Coffee Cooperative; Vice Chairman in charge of Agriculture; Married Bean Company; (iii) Can Tho City: Viet Nam Chamber of Commerce and Industry; selected agriculture enterprises; RIAS Cooperative Development Expert; (iv) Soc Trang Province: DFATD Canada SME Project PMU; Department of Finance; VBARD; (v) Quang Binh Province: selected enterprises and cooperatives; Sacombank; Techcombank; Cooperative Association; Farmer Union; Women Union; visit to CSA models; (vi) Ha Giang Province: Women Union, Farmer Union; Cooperative Association; Techcombank; VBARD; and a technical workshop was held with enterprises, cooperatives, cooperative groups on IFAD-supported financial tools; and at national-level: Small & Medium Enterprises Development Fund; IDH.

relevant to agriculture, rural development, poverty reduction, environment and climate change were discussed, and relevant documentation identified and obtained:

GoV ministries, departments and agencies

- Ministry of Finance (MOF) – Departments of External Debt Management, and International Organizations
- Ministry of Planning and Investment (MPI) – Department of Science and Technology, Agriculture, and Foreign Economic Relations
- Ministry of Agriculture and Rural Development (MARD) – Departments of Science Technology, International Cooperation, Planning, Cultivation, Fisheries, Forestry, and the National Coordinating Offices for the National Target Program for New Rural Development (NTP-NRD), Center for Agrarian Systems Research and Development (CASRAD), Viet Nam Agriculture Academy, Institute of Policy and Strategy for Agriculture and Rural Development (IPSARD),
- Ministry of Natural Resources and Environment (MoNRE) – Division of Science, Technology and International Cooperation
- Viet Nam Committee for Ethnic Minorities Affairs

Regional consultation workshops were organized jointly by MOF and IFAD with representatives of provincial governments in Thai Nguyen for the Northern mountainous provinces, and in Da Nang for the central provinces. Participating in those workshops were representatives of Bac Kan, Bac Giang, Lai Chau, Lang Son, Yen Bai, Thai Nguyen and Tuyen Quang provinces (Thai Nguyen workshop); and Gia Lai, Dak Nong, Quang Binh, Ninh Thuan and Kon Tum provinces (Da Nang workshop).

Private and finance sector

- Viet Nam Bank for Social Policies (VBSP)
- Viet Nam Chamber of Commerce and Industry
- VinEco Ltd.

NGOs and mass/civil society organizations

- SNV
- Helvetas
- Viet Nam Farmers' Union
- Viet Nam Womens' Union

International cooperation

- | | | |
|--------------------------|---------|-----------------------|
| • AFD | • CIRAD | • KOICA |
| • Asian Development Bank | • FAO | • Netherlands Embassy |
| • Australian Embassy | • GIZ | • UNDP |
| • CIAT | • ILRI | • World Bank |
| | • JICA | |

National Context

Description of Physical and Biological Environment

Physical environment. Viet Nam is located on the eastern margin of the Indochinese peninsula and occupies about 331,231 km², of which about 46% was under cultivation – annual crops, cereals, perennial and fruit crops, including industrial

crops – in 2017 (GSO, 2018). It borders the Gulf of Thailand, Gulf of Tonkin, and Pacific Sea, China, Laos, and Cambodia. This S-shaped country has a north-to-south distance of 1,650 kilometers and is about 50 kilometers wide at the narrowest point. With a coastline of 3,260 kilometers, excluding islands, Viet Nam claims 12 nautical miles (22.2 km) as the limit of its territorial waters, an additional 12 nautical miles as a contiguous customs and security zone, and 200 nautical miles (370.4 km) as an exclusive economic zone.

Viet Nam is a country of tropical lowlands, hills, and highlands; relatively level lands represent no more than 20% of the terrestrial areas. The country can be roughly divided into five geophysical regions:

- Red River Delta – located in the north of the country, it is a flat, triangular region of 15,000 km² that is smaller but more intensely developed and more densely populated than the Mekong Delta. Once an inlet of the Gulf of Tonkin, it comprises an enormous alluvial deposit that has been laid down over a period of millennia. The delta region, backed by the steep rises of the highlands, is no more than three meters above sea level, and much of it is one meter or less. It is the ancestral home of the ethnic Viet Nameese (Kinh peoples)
- Northern Mountains – the highlands and mountain plateaus of the north and northwest are a part of the Annamite Range that originates in the Tibetan and Yunnan regions of southwest China and forms Viet Nam's border with Laos. These central mountains, which have several high plateaus, are irregular in elevation and form. The northern section is narrow and very rugged and the country's highest peak (Fan Si Pan) is found in its extreme northwestern portion, rising 3,142 meters above sea level. The southern portion has numerous spurs that divide the narrow coastal strip into a series of compartments. For centuries these topographical features not only rendered north-south communication difficult but also formed an effective natural barrier for the containment of the people living in the Mekong basin. The area is home to a large percentage of Viet Nam's ethnic minorities.
- Central Highlands – are a 51,800 km² plateau located in the southern half of Viet Nam, comprising rugged mountain peaks, rich soils, and in the past, extensive forests. Its five relatively flat plateaus account for 16% of the country's arable land. Since 1975, the relocation of people from the densely populated lowlands has been ongoing into the Central Highlands.
- Coastal lowlands – the narrow, flat coastal lowlands extend from south of the Red River Delta to the Mekong River basin. On the landward side, the Annamite Range rises steeply above the coast, with spurs jutting into the sea at several places. In general, the region is fertile and intensively cultivated.
- Mekong Delta – is a low, flat 40,000 km² plain, not more than three meters above sea level at any point. It is crisscrossed by a maze of canals and rivers. About 4,200 km² of the delta was under rice cultivation in 2017 (GSO, 2018), making it one of the major rice-growing regions of the world.

Soils. Soils in Viet Nam span 14 groups and 31 soil units. The three main soil groups are mountainous and hilly soils, and delta soils (FAO, 2006). The soils in the mountainous and hilly group are mostly ferralitic (14.2 million ha), acrisol, alisol (or red) (3.1 million ha). These soils degrade quickly and tend to be acidic with low fertility. They can be used for afforestation, for the expansion of perennial crops, and fruit crops. Separately, the soils in deltas are mostly alluvial soils (3.4 million ha),

marine sandy soils (0.5 million ha) and gley soils (0.5 million) (IPNI, n.d.). These soils are very fertile and thus effective for intensive cultivation. According to FAO (n.d.) there are nine main agro-ecological areas as classified by topography, soils and climate. See Figure 1.

Hydrology. Viet Nam has a dense river network — 2,360 rivers with a length of more than 10 km. Eight out of these are large basins with a catchment area of 10,000 km² or more. This river network includes many international rivers that originate in catchments in other countries. About two thirds of Viet Nam’s water resources originate outside the country, making Viet Nam susceptible to transboundary water resources decisions made in upstream countries.

The total area in- and outside Viet Nam of all international catchments is close to 1.2 mill. km², which is approximately three times the size of Viet Nam itself. The total annual runoff is 835 billion m³ but the shortage of water is aggravated in the 6-7 month dry season when the runoff is only 15 to 30% of this total.

All the rivers traversing Viet Nam provide an abundant supply of water (255 billion m³ annually). However, inadequate physical infrastructure and financial capacity results in a low utilization of only 53 billion m³ per year. In addition, the uneven distribution across Viet Nam of the average annual rainfall of 1,960 mm and the prolonged dry season result in serious shortages of water in many areas.

Groundwater resources are abundant with the total potential exploitable reserves of the country's aquifers estimated at nearly 60 billion m³ per year. However, despite the abundance of groundwater reserves, less than 5% of the total reserves are exploited for the country as a whole. In some areas, over-exploitation has resulted in falling water tables which contributes to further land subsidence and salinity intrusion, especially in the Mekong River Delta. (Water Environment Partnership in Asia, n.d.).

Forests. The forests of Viet Nam have been under serious threat for some 75 years. Between 1943 and 1993 significant clearing and forest loss took place, with national forest coverage declining from about 45% to 20%. Since 1993, considerable efforts have been made to increase overall forest cover yet deforestation, and degeneration of forests had already resulted in very significant loss of habitat and the array of ecological services that natural forests provide. Lowland forests, which support the greatest biodiversity, have been almost entirely lost, and the mangrove forests have been significantly degraded. (GoV, 2011).

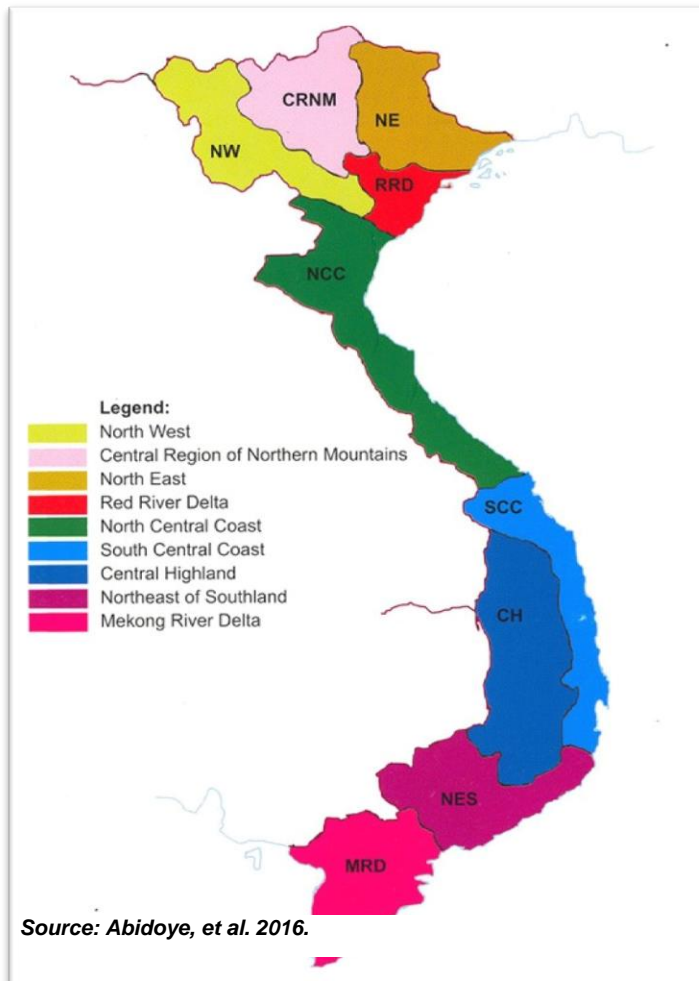
According to FAO (FAOSTAT, 2018) forest area has increased to 14.8 million as of 2016 (about 44% of the land area). The increased forest cover is, however, mostly from establishment of monocultural forest plantations²⁰ (CIFOR, 2012), primarily for the production of low value wood chips (for pulp) for export²¹. Since 2008, the area of plantations has grown by 49% to 4.14 million ha in 2016 (GSO, 2018).

²⁰ Additional gains have come through the re-designation and inclusion of previously omitted limestone forests, and natural regeneration - predominately of bamboo forest area.

²¹ Viet Nam is the largest exporter of hardwood chips and supplies more than one-third of the Asia market (Flynn, 2018).

These do not provide the same range of ecosystem services that undisturbed, natural forests would. Nationwide, only some 2.25 million ha of natural forests were estimated to remain as of 2016, the year that the Prime Minister's office ordered a total ban on their clearing²². As of 2015, only some 83,000 ha of primary forest remained countrywide, versus in 1990 where still only some 384,000 ha of primary forest were estimated to be in existence (FAOSTAT, 2018).

Figure 1. Agro-ecological zones of Viet Nam



According to reports by the Ministry of Agriculture and Rural Development (MARD), between 2010 and 2014 more than 0.27 million ha were cleared legally for the establishment of commercial tree crops, hydropower reservoirs and roads and illegally, for other land uses; with legal and illegal clearing accounting for about one-half, each.

Forest cover is divided into the three forest management categories used in Viet Nam: Special-use Forest (16% of total forest area), Protection Forest (36% of total forest area) and Production Forest (48% of total forest area)²³.

Productivity in the forest sector is also low (versus forest degradation and loss, which has been high). State Forestry Companies (SFCs) manage about 14 percent of the country's 13.8 million ha – which comprises the country's most productive forest lands – and are beset with numerous problems, including poor

forestry practices that result in the degradation of the resource base and low yields.

According to Viet Nam's REDD Readiness Preparation Proposal (MARD, 2011), the current main direct causes of deforestation are generally agreed to be a result of: (i)

²² <http://www.thanhniennews.com/society/Viet-Nam-pm-bans-cutting-down-of-natural-forests--63363.html>.

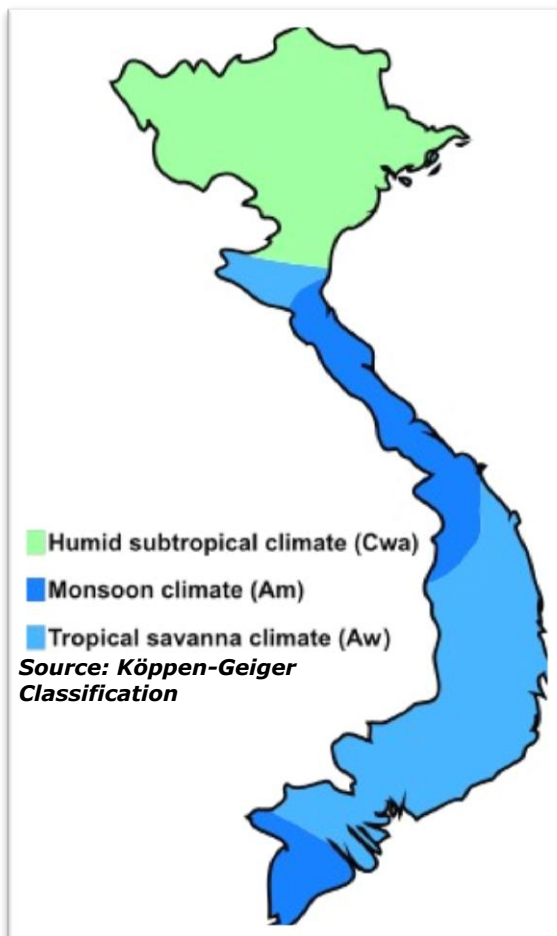
²³ *Production forests* are designated for the production of timber and timber products. They can be natural or plantation forests. While policy mandates that production of raw materials for forest industry should be prioritized, some alternatives are allowed in mountain areas where the objectives of forest rehabilitation/enrichment and livelihood improvements for local peoples can be met through establishment of multi-purpose species and NTFPs. *Protection forests* are designated for purposes of watershed protection, coastal zone and island protection, stabilization of lands subject to aeolian processes, environmental protection for large urban areas and, as buffers on national borders. Multiple uses, compatible with the maintaining protection functions, may be permitted to benefit local communities. *Special use forests* are primarily for biodiversity protection, but contemplate some multiple-use by local communities outside of the core zone (e.g., agroforestry, ecotourism and/or recreation).

conversion to agriculturally cultivated land (particularly to industrial perennial crops); (ii) the impacts of infrastructure development and hydropower plans; (iii) unsustainable logging; and (iv) forest fires. There might be other direct drivers but these are not significant at present and include invasive species, mining, bio-fuels and climate change.

The loss of natural forest cover on steep slopes, within riparian areas and in upper parts of watersheds, has been a factor impacting watershed health and contributing to localized flash flooding and reduced dry season stream flows; especially in areas where subsequent land use practices have destroyed soil infiltration capacity. Natural forests, which would deliver higher levels of services in watershed protection (e.g., protection against soil erosion and localized flash flooding control, dry season low flows) and habitat/biodiversity values, have not been recovered.

Climate. Viet Nam is located in the tropical belt and is hot and humid throughout the year. The climate of the country can be divided into three zones – a northern region, a central region, and a southern region. The climate of the country varies across the three regions. The climate is humid subtropical in the northern region, tropical monsoon in the central region, and tropical savannah in the southern region (Figure

Figure 2. Climate zones of Viet Nam 2). Due to the country's varied terrain, Viet Nam has several sub-climate regions. Lao Cai Province in the northern region and Lam Dong Province in the southern region, for instance, have a temperate climate, whereas Son La province in the northern region enjoys a continental climate. (Abidoye *et al*, 2016).



Seasonality. Each of the three regions has slightly different seasons. In the southern region, there are two different seasons, a rainy season from November through April and a dry season from May to October. The northern region has four distinct seasons. The hot and rain season occurs from April to October, with the wettest period in July and August. The dry season runs from November to March, with the driest months being December and January. In the central region, the dry season occurs from November to April. (Abidoye *et al*, 2016).

Rainfall. Over the period of 1911-2000, the average annual rainfall throughout country ranged from 1,500 to 2,000 mm, and the humidity level ranges between 84% and 100% throughout the year. During La Niña climate conditions, in the northern climate zone there has been a decrease in annual precipitation, whereas in the southern zone there has been an increase (Thang, 2016). On average, precipitation in Viet Nam

decreased by 2 per cent during the period 1958-2007 (FAO, 2011).

Temperature. Over the last 50 years, average annual surface temperature in Viet Nam has increased by 0.5°C to 0.7°C (ISPONRE, 2009). The mean temperature ranges from 21°C to 27°C and is higher in the southern parts of the country. Overall, the average annual temperature in the plains is slightly higher than in the highland and mountainous regions. The temperature drops to its lowest level (about 5°C on average) during the winter months of December and January, while it rises to its highest levels (more than 37°C on average) during April. In the summer, the average temperature is about 25°C. In some parts of the northern region, the temperature goes to 0°C and there is some snowfall (GoV, nd.).

Description of socio-cultural context

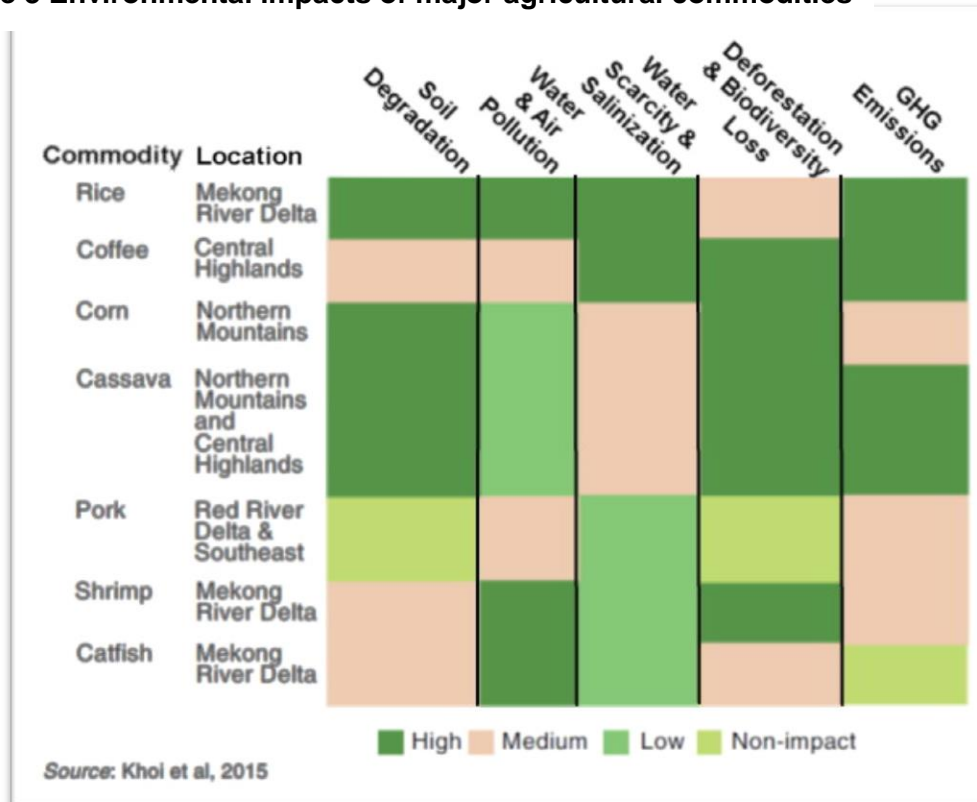
Viet Nam's macro-economic development record over the past 30 years is remarkable. Economic and political reforms under Đổi Mới, launched in 1986, have spurred rapid economic growth and development and transformed Viet Nam from one of the world's poorest nations to a lower middle-income country. The economy is performing well, propelled by the sustained global recovery and continued domestic reforms. Robust growth is boosting job creation and income growth, leading to broad-based welfare gains and poverty reduction. Viet Nam's gross domestic product (GDP) is estimated to have increased by 7.1 percent (y/y) in the first half of 2018. GDP growth was broad-based, led by strong manufacturing growth of 13 percent, bolstered by strong external demand. Agriculture output growth also accelerated to 3.9 percent largely due to strong performance in the export-oriented fishery subsector. Meanwhile, expansion of the service sector remained robust at 6.9 percent underpinned by strong underlying retail sector growth supported by buoyant private consumption and record tourist arrivals.

Viet Nam's medium-term outlook has improved, with real GDP is now projected to expand by 6.8 percent in 2018 before moderating to 6.6 percent in 2019 and 6.5 percent in 2020 due to the envisaged cyclical moderation of global demand. Despite reduced slack in the economy, inflation is expected to remain around the 4 percent government target, predicated on some tightening of the monetary stance to counter price pressures emanating from domestic input price pressures and rising global commodity prices. On the external front, the current account balance is projected to remain in surplus, but start narrowing from 2019, reflecting widening deficits on the income and services accounts. Fiscal consolidation is expected to contain public debt over the projection period. (World Bank, 2018b) The agriculture and rural development sector have enjoyed significant growth. In the ten-year period between 2008 and 2017, the absolute contribution to GDP by agriculture, forestry and fisheries grew by 70%, from USD 20.2 billion to USD 34.3 billion (current dollars).

In contrast, its relative contribution of agriculture to GDP has been constantly decreasing from 25% in year 2000 to 15% in 2018, reflecting a deep transformation of Viet Nam's economy (GSO, 2018). Growth in the sector is fueled by significant export earnings from fisheries products, wood and wood products, cashews, coffee, rice, rubber and black pepper; tea and cinnamon are also becoming important export commodities. Export earnings from agriculture, forestry and fisheries have also grown steadily, reaching an estimated USD28.3 billion in 2017, contributing to an agriculture trade surplus of about USD17.3 billion (GSO, 2018). Industrial crops, vegetables and livestock production have also developed rapidly and largely meet domestic demand. **Key issues and constraints in the agricultural sector.**

Viet Nam's agricultural productivity is still relatively low, though this varies across commodities. Rice yields are relatively high compared with regional peers and coffee yields have also been the highest among major coffee producers. Yields in other main crops, however, have exhibited low productivity. Some of the major factors contributing to low productivity include: (i) poor land use practices, particularly the utilization of lands unsuited for the particular crop or production system; (ii) low investment in technology for crops other than rice; (iii) the part-time nature of labor in agriculture, which equates to low labor productivity; (iv) land fragmentation and the small size of holdings; and (iv) low water productivity due to aged irrigation infrastructure that undermines the potential for resource use optimization through better overall water management and irrigation practices. To offset low productivity, agricultural growth has resulted from the expansion of agricultural land and intensive use of fertilizers, pesticides and water for crops, and antibiotics in aquaculture. Fertilizer application rates in Viet Nam are about double that of other Southeast Asian countries (World Bank, 2016), and thus a major concern as regards non-point

Figure 3 Environmental impacts of major agricultural commodities



source water pollution from agriculture. Rice production practices are also a significant source of GHG emissions (which are about half of the agriculture sector's aggregate GHG emissions, about 42% of the national level). These trends have resulted in Viet Namese agriculture having a rather large and extensive environmental footprint, which needs to change via the modernization of agricultural practices. Figure 3 provides an overview of the principal environmental impacts resulting from agriculture, by commodity and by region.

Viet Nam has only 0.104 ha per capita of agricultural land; the global average is 1.20 ha. Those lands available to the majority of smallholder farmers tend not to fall in the desirable agricultural lands but rather on more marginal lands. Some three-quarters of Viet Nam is classified as "sloping lands" and one-half has slopes greater than 35 percent. These soils are frequently of poor quality: 50 percent of lands are

low in N; 80 percent low in K; 72 percent low in Ca; and 48% low in Mg (Tien, 2015). One study²⁴ identified and characterized some 996 geographic hotspots of human-induced land degradation at the national level and the social, economic and biophysical factors associated with them, and quantified their directions (positive/negative) and relative weights. Results showed that about 19% of the national land mass has experienced persistent declines in biomass productivity over the last 25 years. Most of the degraded areas are found in the Southeast and Mekong River Delta (17,984 km²), the Northwest Mountains (14,336 km²), and the Central Highlands (13,504 km²).

Smallholder agriculture. The main producers of agricultural products in Viet Nam are the smallholder's farmers, which number some nine million households. Largely unorganized –successful, long lasting cooperative organizations are few²⁵ – they are commonly challenged by access to credit, services, markets, information, and technology. Due to the small-scale and dispersed nature of their production, even those private companies who wish to form enterprises-farmers linkage, find this difficult due to high transaction costs and high uncertainty in contract compliance (IFAD, 2018).

Upland and hillslope agriculture are more often the norm and significant areas are dedicated to upland annual cropping, resulting in highly accelerated soil erosion with all the attendant issues this causes (soil degradation, loss of productivity and yield reductions, sedimentation and degraded water quality, hydrologic modifications, etc.). Even though terracing is common for some crops (e.g., irrigated, upland rice), for most crops (e.g., maize, cassava) it is not practiced, nor are other soil and moisture conservation practices common or widely used in hillslope agriculture (e.g., contour cultivation, reduced tillage, mulching, crop residue management, vegetative or constructed contour barriers, etc.). In some parts of the country shifting farming is also practiced by relatively small numbers of ethnic minorities (e.g., Raglai peoples in the uplands of the Central Coastal Region). One study (Nguyen Van De, et. al. 2007), suggested that loss of fertile top soil under these conditions would be more than 8 times the maximum Soil Loss Tolerance Value. Deforestation of steep slopes, along water courses and in upper watersheds is another factor that effects soil loss as well as flash flooding and dry season stream flow.

Rural poverty. Viet Nam has made tremendous progress in poverty reduction. The proportion of the population living below the national poverty line (using the General Statistics Office of Viet Nam and World Bank poverty line) reached 9.8 percent in 2016—down by over 70 percent from 1993. More than 40 million people escaped poverty over the period. A similarly strong trend is observed for people living on less than \$1.90/day (in 2011 purchasing power parity terms), where the rate fell from above 50 percent in 1993 to 2.0 percent in 2016. Poverty reduction has been coupled with significant improvements in shared prosperity, with the average consumption level of Viet Nameese in the bottom 40 percent growing by 6.0 percent annually from 2010 to 2016 (World Bank, 2018a). There is no difference in poverty rates between male- and female-headed households (except those headed by ethnic minority women), and female-headed households are less likely to be poor than male-headed households.

The success in reducing poverty has come largely from rapid economic growth that has created more and better jobs. Government investments have significantly

²⁴ Vu, M.Q. 2014. Multi-Level Assessment of Land Degradation: The Case of Viet Nam. A Ph.D. thesis submitted to ETH Zurich.

²⁵ Cooperatives have a dubious legacy, in part due to ineffective support from government (policies and organizational support), which leaves them weak and low capacity (IFAD, 2018).

improved service delivery, education, and public infrastructure, which facilitated growth and enabled broad participation in the economy. The transformation from an agrarian economy to labor-intensive manufacturing and services industries has been key, where these sectors created 15 million jobs over the past 20 years (ibid). Improved education has been an important pathway to obtaining better jobs. Migration to cities presented rural households with nonfarm opportunities. These factors have contributed to households diversifying their income sources from agriculture. Those earning a higher share of income from non-agriculture enterprises and non-agriculture wages are more likely to be non-poor.

Between 2014 and 2016 alone, the booming export sector and rising domestic demand from the emerging consumer class helped create more than 3 million jobs. Nearly 80 percent of these were in the manufacturing (50 percent), construction, retail and hospitality sectors, which absorbed a net outflow of 2 million workers out of agriculture. This marks a turning point in Viet Nam's structural transformation, as employment in agriculture shrunk in absolute terms too, accompanied by rapid growth in wage employment in all sectors, including agriculture. Robust labor demand over this period boosted average monthly wages in the private sector by a cumulative 14 percent. Households in Viet Nam are therefore increasingly wage dependent. About 54 percent obtained most of their income from wages in 2016. Also, two in five people now have a paid job. The rise in wage incomes contributed to more than half of the decline in poverty during 2014-16 and 40 percent of the increase in the share of people attaining economic security (World Bank, 2018).

Even amongst ethnic minorities there have been notable gains in recent years. Between 2014 and 2016, poverty among ethnic minorities declined by 13 percent, representing the largest drop in poverty among ethnic minorities in the past decade. However, strong inequalities between ethnic groups yet persists. Close to 45 percent of ethnic minorities still live in poverty. Ethnic minorities, who make up only 15 percent of the country's population, constituted 73 percent of the poor in 2016. Their average per capita consumption was still less than 45 percent of the Kinh and Hoa. As the economy grows, the absolute gap between ethnic minorities and the Kinh and Hoa has increased. Poverty is also significantly deeper among poor ethnic minority households than among poor Kinh and Hoa households. Similar disparities are evident in education, and gaps at the upper secondary level in 2016 mirrored gaps at the lower secondary level a decade earlier. Thus, even as society progresses, those at the bottom remain there. Despite recent progress, targeted measures will be necessary to ensure that poverty rates among ethnic minorities converge with the national average (World Bank, 2018).

Poverty remains highly concentrated in rural areas, amongst ethnic minorities and in the uplands of Viet Nam (the Northern Mountains, upland areas of the North and Central Coast, and the Central Highlands). Table 1a shows that while the overall poverty rate dropped 44.2 percent between 2010 and 2016, for ethnic minorities the rate was less than half that average (20.2 percent) as compared to the majority Kinh and Hoa (Chinese) peoples whose poverty rate dropped overall by almost 74 percent.

Table 1a. Number and Distribution of Poor People, 2010-16

Year	Number of poor people				Share of poor people (%)		
	Vietnam	Rural	Ethnic minorities	Kinh & Hoa	Rural	Ethnic minorities	Kinh & Hoa
2010	17,889,556	16,342,568	8,354,993	9,534,563	91.4	46.7	53.3
2012	15,341,951	13,905,071	7,803,869	7,538,082	90.6	50.9	49.1
2014	12,432,678	11,258,372	7,430,997	5,001,681	90.6	59.8	40.2
2016	9,123,737	8,637,695	6,653,882	2,469,855	94.7	72.9	27.1

Source: World Bank, 2018

As poverty decreases overall, the face of poverty is overwhelmingly rural and that of ethnic minorities. The remote, mountainous areas are where the poor are concentrated, and these are heavily populated by ethnic minorities. As shown in Table 1b, poverty is increasingly concentrated in three regions of the country, where the rates of decrease in the absolute number of poor are about half that of the more favored regions. About 73 percent of the population in high mountain communes are ethnic minorities, while more than 96 percent of the population in coastal and inland delta communes are Kinh and Hoa. The ethnic minorities' population is overwhelmingly concentrated in rural mountainous communes, where more than 80 percent of them live. Only 11 percent of ethnic minorities live in urban areas. In contrast, 35 percent of the Kinh and Hoa are urban and another 45 percent lives in coastal and inland delta rural communes. Poverty rates for both ethnic minorities and the Kinh and Hoa are higher in mountainous areas. However, in low and high mountains where the data allows for within location comparison, the incidence of poverty among ethnic minorities is as much as 6 times more than the incidence of poverty among the Kinh and Hoa. Thus, high poverty among ethnic minorities do not just reflect their geographical location, but differences between them and the Kinh and Hoa as well. (World Bank, 2018a).

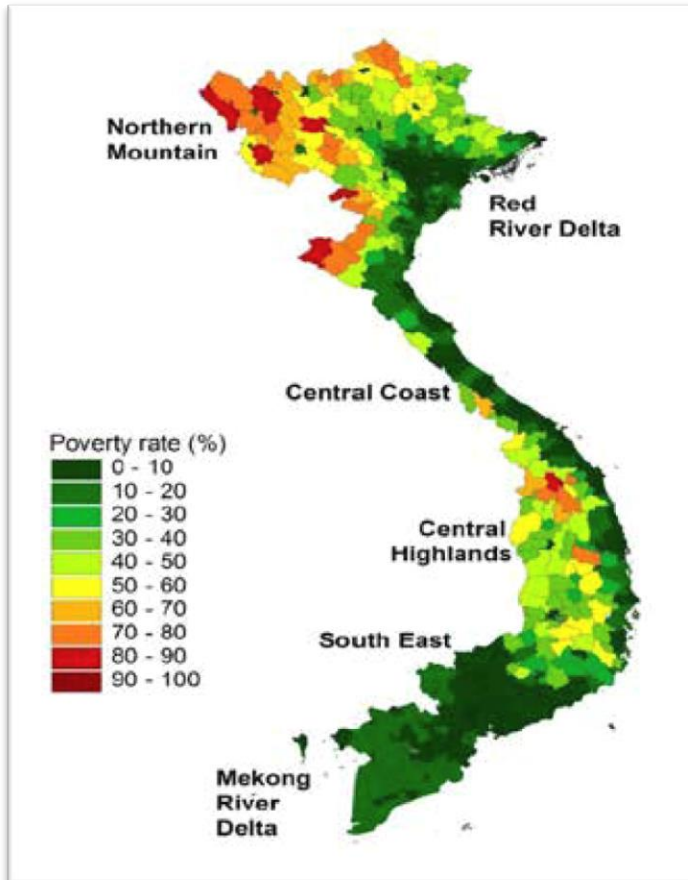
Table 1b. Poverty Trends by Region, 2010-16

Regions	Poverty Headcount Rate					Distribution of the Poor			
	2010	2012	2014	2016	Change	2010	2012	2014	2016
Red River Delta	11.9	7.5	5.2	2.2	-3.0	13.7	9.9	9.0	5.2
Northern Mountains	44.9	41.9	37.3	28.0	-9.3	28.6	33.4	35.6	40.2
Northern and Coastal Central	23.7	18.2	14.7	11.8	-2.9	25.9	23.7	23.3	26.7
Central Highlands	32.8	29.7	30.4	24.1	-6.3	9.5	10.0	13.7	16.2
Southeast	7.0	5.0	3.7	0.6	-3.1	5.2	4.7	4.6	1.0
Mekong Delta	18.7	16.2	9.8	5.9	-3.9	17.1	18.4	13.7	10.8

Source: World Bank, 2018

Poverty reduction achievements in Viet Nam appear to be becoming more sustainable. Whereas, among 2010's near-poor, 17 percent had fallen back into poverty by 2014, more recent analysis (World Bank, 2018) found that only 2 percent of individuals who were not poor in 2014 had fallen into poverty in 2016. Similarly, while 13 percent of households classified as economically vulnerable in 2010 had fallen below the poverty line in 2012, just 7 percent of economically vulnerable households in 2014 had fallen into poverty by 2016. Almost all the households classified as economically secure in 2014 remained non-poor in 2016. This suggests

Figure 4. Poverty rate by district (2014)



Source: World Bank, 2018a

that Viet Nameese households that escape poverty are increasingly likely to sustain their gains.

Data on economic mobility by household characteristics for 2014–16 showed that ethnic minority households had the highest risk (13.8 percent) of falling into a lower economic class over the period; 70 percent greater than that of Kinh and Hoa peoples. The same data shows that households dependent upon agricultural livelihoods (both nonwage and wage incomes) were also the most likely to fall into a lower economic class (approx. 11.3 percent). In no small part this is due to the rural poor being largely dependent upon agricultural livelihoods and thus vulnerable to natural disasters, weather and/or climate risks, and crop pest and disease outbreaks. In 2017 alone, estimated losses from natural disasters were

over USD2.6 billion, with over 350,000 ha of crops affected. In 2014-2016, the worst drought in almost a century occurred, which at its peak left some two million people without access to water for consumption and domestic use and an equal number suffered income loss; another 1.1 million people were made food insecure, and water-related diseases and acute malnutrition significantly increased. Human disasters, including severe illness, death; and material crisis are another explanatory factor. In addition, many poor and near-poor households rely on informal sources of income, i.e. family farming, small household enterprises, and casual employment in the wage sector. Earnings in these sectors are typically variable and tend to be lower than in the formal sector. Small shocks can therefore relatively easily send households back into poverty.

Gender. While overall agricultural employment has been declining as a share of total employment, in rural areas it is still the primary source of livelihoods for the great majority of people. As of 2017, about 40% of employed persons were employed in

agriculture; down from over 55% as recently as 2005. In the rural areas, about 68 percent of women and 58 percent of men work in agriculture. Most women work as unpaid family labour on farms, and their free labour is often assumed in planning agricultural development projects and programmes - 53 percent of all employed women work as unpaid family labourers compared with 32 percent of men. Regulations governing minimum wages for women are widely ignored or circumvented by contract and piece-work, and by offering "part-time" menial, low-paid tasks which sometimes add up to more hours for less remuneration than full-time work. In addition, women are responsible for most of the unpaid household and community work which is usually invisible, unrecognised and carries low status. Women farmers remain, officially, largely invisible. When they are not seen, they are not addressed by policy, and their needs are routinely overlooked. Too commonly, "farmers" are considered male, "household heads" are men, households are homogeneous, and official support to agriculture directed by men to men. A gender-informed approach to farming as a policy issue has barely been recognised in Viet Nam, so little strategic planning has been done. Instead, an ad hoc approach channels occasional inputs to women as passive recipients of welfare rather than as economic partners in a vital and dynamic production sector. In response, women ignore official proffering and get on with their long and lengthening work day. In Viet Nam as elsewhere, policies and plans that are not explicit about including women in rural development effectively exclude them and thereby retard all development. Most policies are silent on gender and on broader issues of equity; plan objectives are gender blind; data are unavailable, inadequate or misleading; resource allocations are extremely limited; women remain invisible and strategies by-pass them; mandates and accountability for gender mainstreaming is absent; and gender awareness and commitment to equity are weak. Job descriptions rarely mention gender, and management is not held accountable for meeting either gender or social objectives. This situation generally pertains at all levels and in most development projects.

The trend for men to migrate out of agriculture into more attractive employment (or any employment) in other sectors will continue to place an increasing burden on women farmers. Women left behind will be expected to shoulder more of the agricultural and rural development work in the future, leading inexorably to a longer working day on a natural resource base which may be depleted or degraded due to over-exploitation and misuse. Labour bottlenecks could limit growth, delay or extend critical periods such as harvesting, and increase the unattractiveness of agriculture as a career for the brightest and best among youth. Low female productivity in agriculture will increase food insecurity, decrease rural household incomes and thereby increase rural poverty.

Women's access to land and other capital is far less than that of men, and men control most productive inputs in the farming and forestry sectors. If women are to take increasing responsibility for primary production and processing, barriers around their access to and control over relevant resources must be removed. These include direct access to credit, land, water and other agricultural inputs, women's active participation in organisations including decision-making bodies at all levels, access to extension information and services, access to education and training, and participation in decision-making and management.

Credit from the formal banking sector is an input which is relatively in-accessible to women, yet women have shown themselves, particularly through WU managed SCGs to be bankable clients with rates of return often exceeding those of men. It is extremely cost-effective to make special provisions to accommodate women as users of credit in their own right, and this may include changes in rules and regulations

especially for collateral, direct extension support to women, special education and training, and the provision of financial packages which complement the provision of credit.

Further exacerbating ethnic minority women's and women-headed household's struggles in escaping poverty are growing impacts and risks associated with weather, natural disasters and climate change.

It is essential that the specific situation and needs of women, especially ethnic minority and women-headed households, are effectively considered. This means enhancing their learning opportunities in order to regain and assume new leadership and entrepreneurial roles in their communities. For ethnic minority women, it means increasing the opportunities for productive and stable on-farm and off-farm employment. Investment projects will need to propose specific measures to ensure women's participation in relevant activities, including minimum participation rates in Village Development Boards (VDBs) and collaborative groups (CGs) and for vocational training and credit access. Women must also be strongly engaged in value chain development through inclusive business, women entrepreneurship programs. Women can also be specifically reached by: (i) maintaining a gender balance in management and community based decision-making; (ii) an appropriate information strategy (since many ethnic people are not fluent in the Kinh language and the incidence of female illiteracy is high); (iii) expanding livelihood options by targeting women in literacy, numeracy, financial management and market orientation training and job/skills training and extension; (iv) promoting women's savings and credit and marketing groups; (v) the sensitization of government staff to issues and problems relating specifically to ethnic minorities and women; and (vi) increased awareness building for women on improving nutrition and child care, particularly in ethnic minority groups.

Youth. Viet Nam has entered the period of golden population with the highest ever percentage of young people in its population. Youth makes up to 23.75 of the labour force, aged 15-29 years old.²⁶ Making its transition to a higher value economy, Viet Nam is facing the challenge of producing jobs for its young and expanding labour force and providing it with relevant skills for the growing service and manufacturing sectors. Young people have a greater likelihood of being unemployed and among the working poor than adults, reflecting both structural issues and young people's particular vulnerability to economic shocks. Despite current industrialization, agriculture remains the dominant sector of employment creation in Viet Nam amounting to 44% of the total employed population. Among youth, 33% are employed in agriculture (OECD, 2017). Yet, these jobs are often precarious and low paid. In rural areas, waged workers represented 41% of employed youth in 2014, while the share of waged workers among youth in urban areas reached 71.5%. Ethnic minorities are also disadvantaged compared to the Kinh youth, with a higher share (58%) of them engaged in unpaid family work than their Kinh peers (23%) (OECD, 2017). Among the causes to youth unemployment and low wage, limited access to education which resulted in skill mismatch is highlighted as a main problem by Government (*The Viet Namese Youth Development Strategy 2011 - 2020*). More investment in vocational training is needed to address the skills mismatch problem, especially in rural areas. Curriculum should be revised in consultation with industries to better match the needs of the labour market. Rural labour market information systems should be improved to identify occupational trends and needs. The quality of vocational training also needs to be improved in order to guarantee

²⁶ GSO (2017) - <https://www.gso.gov.vn/default.aspx?tabid=714>

favourable conditions for learners and meet the recruitment of enterprises. Teacher training and better monitoring and evaluating the impact of vocational training programmes would help improve current programmes.

Agriculture policies must look into local value chain development and catering to domestic markets. Efficient linkages from agricultural production to processing and sales are not well-developed in agricultural regions and producers lack business skills to develop their products. Youth often face difficulties in transiting from traditional agriculture to modern and sustainable methods of production. Although vocational training in agriculture provides some technical knowledge, young people face additional challenges from lack of financial resources and access to land. Small and medium enterprises development should be promoted in the agriculture sector along the value chain in the least developed areas, to help create jobs for youth. Adequate infrastructure development and access to finance and land will need to accompany such initiatives. A comprehensive skills strategy embedded in a broader development strategy should be developed.

Ethnic Minorities. Viet Nam is an ethnically diverse country with 54 officially recognized ethnic groups. The Kinh, the ethnic Viet Nameese, constitute 85.4% of the population. Among the non-Kinh, the Tay, Thai, and Muong account for a little less than 2 per cent of the population each (CEMA, 2017). Until 1/7/2015, total population of 53 ethnic minority groups was 13.4 million inhabitants of which women occupied 49.5% (ibid).

The ethnic minorities belong to eight different language groups (see Table 2 below). They are dispersed throughout the country, inhabiting wide portions of the midland, coastal and mountain areas. They are concentrated mostly in the Northern Mountains and Central Highlands. Ethnic groups intermingle closely and no one group possesses its own private territory. Two or three groups can be found in the same village, and through everyday relations brought about by proximity, they can know each other's language, customs and traditions.

In terms of distribution, 89.6% of total ethnic minority population live in rural and mountainous areas. The Hoa ethnic group is the only group that lives mainly in urban area (CEMA, 2017). According to the World Bank (2009), IFAD (2012) and CEMA (2017), distribution of the ethnic minority groups across seven eco-regions are as follows:

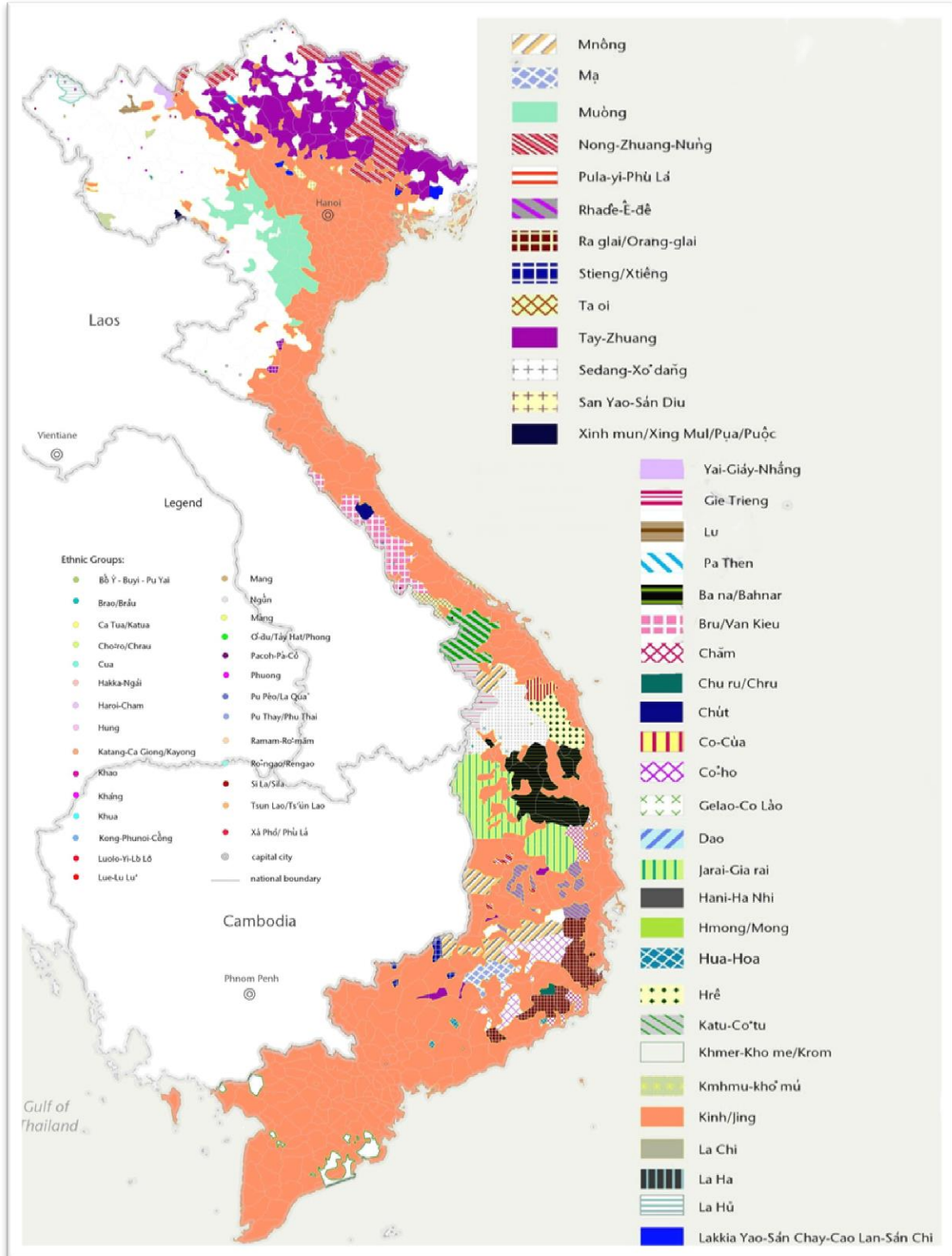
Table 2. Ethnic minority and language groups

Language group	Ethnic minority group
1. Viet – Muong	Chứt, Kinh, Mường, Thổ (4 groups)
2. Tay – Thai	Bố Y, Giáy, Lào, Lự, Nùng, Sán Chay, Tày, Thái(8 groups)
3. Mon – Khmer	Ba na, Brâu, Bru-Vân kiều, Chơ-ro, Co, Cơ-ho, Cơ-tu, Giétriêng, Hrê, Kháng, Khmer, Khơ mú, Mạ, Mảng, M'Nông, Ơ-đu, Rơ-măm, Tà-ôi, Xinh-mun, Xơ-đăng, Xtiêng (21 groups)
4. Kadai	Cờ lao, La chí, La ha, Pu péo (4 groups)
5. Mong – Dao	Dao, Mông, Pà thên (3 groups)
6. Malayo- Polynesian	Chăm, Chu-ru, Ê đê, Gia-rai, Ra-glai (5 groups)
7. Han	Hoa, Ngái, Sán diu. (3 groups)
8. Tibeto – Burman	Cống, Hà Nhì, La hủ, Lô lô, Phù lá, and Si la (6 groups)

Source: IFAD, 2012

- Northern mountains: The region known as the northern mountains encompasses the provinces of Tuyen Quang, Ha Giang, Cao Bang, Lang Son, Lai Chau, Lao Cai, Dien Bien, Yen Bai, Hoa Binh, Thai Nguyen, Son La, Quang Ninh, Phu Tho and Bac Giang. Most of the provinces with a large minority population are located in this region; Cao Bang and Bac Kan, for example, stand out with over 95 percent and 97 percent respectively of the population belonging to an ethnic minority group.
- Red River delta: There are virtually no minorities in this region, with the exception of some Dao groups on the western edge of Hanoi (Ha Tay province before) near Ba Vi National Park, and Hoa minority civil servants who live in the capital city of Hanoi.
- North-central coast: This region includes the provinces of Thanh Hoa, Nghe An, Ha Tinh, Quang Binh, Quang Tri and Thua Thien Hue. Minorities tend to be found in low population numbers along the Annamite Mountains, which run along the western edge of Viet Nam bordering Laos. Many minorities found in this region are also found in Laos in significant numbers. There is a fairly clear dividing line between the groups found in north of Ha Tinh province (in Nghe An and Thanh Hoa) – who are similar to groups found in the northern mountains (Hmong, Dao, Thai) – and those in the provinces south of Ha Tinh, where mostly Mon-Khmer speaking minorities (who are unrelated to those in the north) live.
- Central highlands: This region is a group of provinces that form a high plateau bordering Cambodia and Laos. This area consists of four provinces: Dak Lak, Dak Nong, Gia Lai and Kon Tum. (In the past, the province of Lam Dong was often considered to be in the central highlands, but was recently transferred to the south-east region by the Government. Additionally, Dak Lak used to be one province, but several districts were carved off for the new province of Dak Nong in 2003). Before the twentieth century, the central highlands were almost entirely populated by minorities like the Ede, Gia Rai, Mhong, Xe Dang and Ba Na, with little Kinh in-migration. That changed after the reunification of Viet Nam in 1975, however, and immigration to the region was significant. Currently only about 30 per cent of the total population in the central highlands are ethnic minorities. Kon Tum is the only province in the region that still retains a majority of ethnic minorities. However, even within KonTum, Kinh remain the single largest ethnic group.
- South-east central coast: This region has the second lowest numbers of minorities in the country after the Red River delta; however, with the recent transfer of the province of Lam Dong from the central highlands region to this one, there are some minorities here. Dong Nai, Binh Phuoc, Ninh Thuan and Binh Thuan also have small numbers of minority groups such as Raglai, Coho and Xtieng. Cham are prominent in several areas of Ninh Thuan and Binh Thuan. There are also large numbers of ethnic Chinese (nearly half a million) living in Ho Chi Minh City, especially in Cho Lon quarter.

Figure 5 Map of Ethnic Groups in Viet Nam



Source: IKAP-MMSEA, 2005

- South-central coast: A number of smaller ethnic groups, of both the Austronesian and Mon-Khmer language families, live in the western edges of

- the provinces of Quang Nam, Quang Ngai, Binh Dinh, Phu Yen and Khanh Hoa, where these provinces about the central highlands.
- **Mekong delta:** The main ethnic minorities found in the Mekong are Chinese, Khmer and Cham. Khmer are the largest group, at more than 1 million people, accounting for 10 per cent of the delta's population. Khmer communities are found primarily in the provinces of Soc Trang, Tra Vinh and Kien Giang, with considerably smaller populations in An Giang, Bac Lieu, Ca Mau, Can Tho, Hau Giang and Vinh Long. There are also roughly 20,000 Cham people, mostly in An Giang province, although they are also found elsewhere (particularly the south-central coastal area). There are also around 400,000 Chinese living in all 13 provinces in the Mekong delta, primarily in towns and cities.

Rural producers organizations. As previously mentioned, the main agricultural production unit is the small farm and, generally speaking, the organization of smallholder households into cooperative organizations has not been very successful. In recent years, many provinces have put more and more effort into raising the effectiveness of cooperatives linked to value chain. They have allocated resources from the NTP-NRD program to support the development of cooperatives, with priority given to consolidating existing cooperatives in communes that have registered to become a "New Rural Development Commune" during the 2017-2020 period. They also actively campaign for new cooperative establishment in communes without agricultural cooperatives. (IFAD, 2018a).

As of 2016, there were 30 cooperative alliances and nearly 11 thousand agriculture cooperatives nationwide. In terms of distribution, 3,558 cooperatives (33%) were in the Red River Delta; 3,135 cooperatives (29%) were in the Central Coastal region; 2,023 (19%) were in the Northern Mountain; and 1,257 (12%) in the Mekong Delta. The regions with the smallest numbers of cooperatives was the Central Highlands with 401 cooperatives (4%) and the Southeast region with 282 cooperatives (3%). Relative to organizational needs, the quantity of cooperatives is small, and their effectiveness questionable. Most cooperatives face problems of access to credit and management capability. The desired benefits from cooperative formation and production – including, unified production planning, bulk purchase of inputs and supplies, cooperative marketing and sales, etc. – are not yet seen in the majority of existing cooperatives, which only engage in some limited collective actions (training, extension, some input purchases). Meanwhile, the government's support for cooperative development and support amounts to about VND 4.2 billion/province/year on average (~ USD 180,000), considered to be largely inadequate relative to the challenge. (IFAD, 2018a)

Two other common forms of producers' organizations are found as well. Cooperative groups (CG) are non-legal entities formed by a cooperation agreement, involving three or more farmers, who voluntarily come together to for purposes of collective action. They agreements generally involve sharing labour, capital, responsibilities and benefits. In recent years the development of cooperative groups has been quite strong. In 2016, there were more than 62 thousand of these, organized primarily around export commodity production in the Mekong Delta and Central Highlands. This form of organization is compact, simple and proven effective, but highly ephemeral. Common interest groups (CIG) are another voluntary form of organization, where producers (usually neighbours) join together to share in

collective actions for agricultural production and trade. The groups agree upon and formalize amongst themselves their internal “statutes”, which articulate member’s rights and responsibilities. It is this latter form that IFAD has focused upon and successfully integrated within its projects. Farmers apply the same production technologies and systems, implement micro-finance activities, and other rural economic development activities. They are also seen as the foundation for future development of higher-level cooperative forms. (IFAD, 2018a).

Financial inclusion. The level of financial inclusion remains very low in Viet Nam. Although important progress has been made in terms of promoting access to financial services the targets which have now been reached are still low compared to the need for financial services among the poor and SME clients (World Bank, 2017). Only 59 per cent of Viet Nam’s population have a formal bank account, while the rest have no access to banking services (Viet Nam Investment Review, 2018). Only some 30% of women and 20% of the poorest households (bottom two quintiles) have accounts. In all indicators of financial inclusion, Viet Nam significantly lags behind both its East Asia and Pacific neighbors as well as other lower middle-income countries (World Bank, 2018c). Due to these relatively low financial inclusion rates, Viet Nam is among the 25 priority countries on which the World Bank is focusing its financial inclusion efforts through the “Universal Financial Access (UFA) by 2020” initiative, which seeks to bring two billion unbanked people into the formal financial system. Since 2016, the State Bank of Viet Nam has been partnering with the World Bank on a comprehensive approach to financial inclusion, which will result in a national financial inclusion strategy towards a cashless economy. (Viet Nam Investment Review, 2018)

Main Environmental and Climate Change Challenges

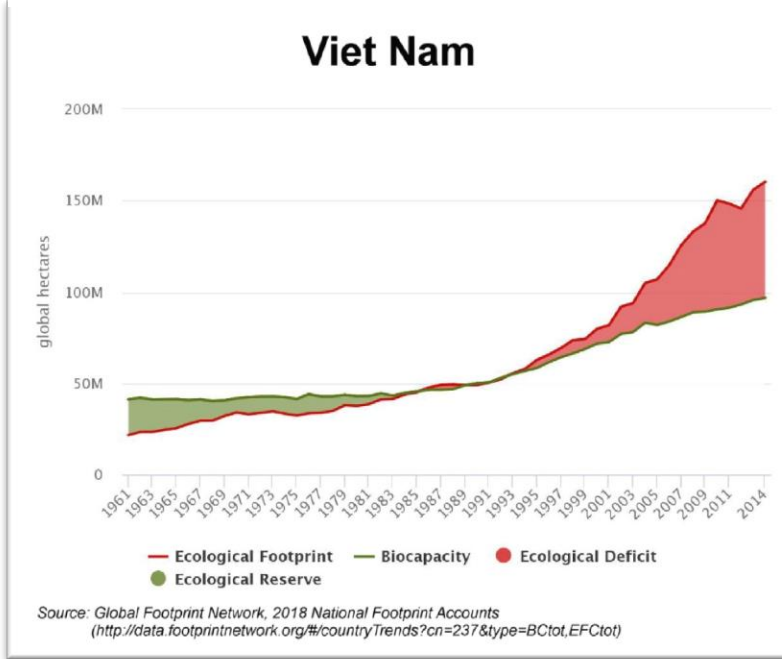
Viet Nam’s economic growth has been fuelled by intense exploitation of natural resources. Utilization of land has intensified, water resources are increasingly stretched, natural forests have been logged, capture fisheries have depleted their resource base, and mineral resources are increasingly exploited. While nothing is wrong with using natural resources for economic growth, development is only sustainable when renewable resources are harvested at a level that allows for replenishment, and proceeds from exploiting non-renewables is invested in other forms of capital.

In Viet Nam’s case, however, the overall growth of the economy, population growth, urbanization, and industrialization are yet combining to increase water pollution, urban air pollution, and the extraction of natural resources. While this is counterbalanced to a certain extent by increasing efficiency in the use of natural resources, technological progress and the structural shift from agriculture toward industry and services, the net result is still one where pressures on the resource base and pollution continue to increase.

Natural resources – land, water, forests, and fisheries – are the foundational assets upon which agricultural production, and the ecosystem services that sustain it, rest. By exploiting these assets, the agricultural and rural sectors have enjoyed significant growth. In the ten-year period between 2008 and 2017, the contribution to GDP by agriculture, forestry and fisheries grew by 70%, from USD 20.2 billion to USD 34.3 billion (current dollars).

This growth, however, was (and still is) heavily subsidized by the unsustainable exploitation of soil, water and forest resources and the degradation and loss of ecological services. Cheap labour and the overuse of fertilizers, pesticides and herbicides have also underlain the “successful” expansion and intensification of agricultural production. These practices have had serious impacts in terms of biodiversity loss, natural resources degradation, and environmental pollution and

Figure 6 Fuelling growth with unsustainable resource



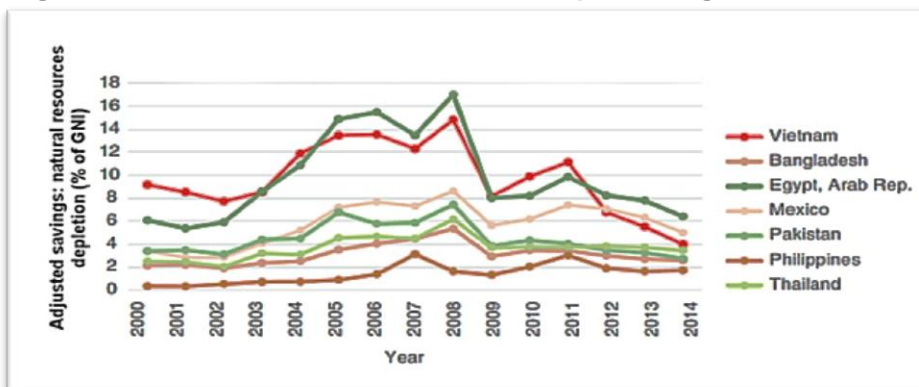
contamination. For these contributions to be sustained, Viet Nam must adopt a path towards the sustainable management and use of natural assets and the environment rather than one of exploiting them beyond their carrying capacity (Figure 6).

Halting and reversing the trends of natural resources degradation will be a difficult challenge for Viet Nam. Historically, Viet Nam has performed poorly as compared to its peers in terms of natural resources depletion as a percentage of Growth National Income (World

Bank, 2016); an indication of the extent to which “business as usual” is subsidized by environmental degradation. Figure 7 shows in a peak growth year (2008), nearly 15 percent of GNI was lost to natural resource depletion. Since 2008 the percentage has been declining, an observation that could, amongst others, be explained by the extent of natural resources degradation that has already been incurred. To effectively utilize its natural assets and achieve the goal of environmentally sustainable development, Viet Nam will have to address both productivity issues and effectively implement its policies and laws on environmental protection, as well as deter violations of these.

Natural disasters. Viet Nam is one of the most hazard-prone countries in the East

Figure 7. Natural resources depletion as a percentage of Gross National Income



Source: World Bank, 2016

Asia and Pacific region, with droughts, severe storms, and flooding causing substantial economic and human losses. Intense rainfall associated with typhoons frequently causes immense destruction in heavily populated coastal areas as well as in the Red River and Mekong deltas, the country’s major rice-growing areas. These deltas are also vulnerable to flooding caused by heavy monsoon rainfall. High year-to-year variation in rainfall across some regions of the country means that some areas that experience floods in rainy seasons can also experience drought in dry seasons. Floods are responsible for almost 70% of all reported deaths²⁷ and 65% of economic losses. Germanwatch (Kreft et al, 2017) ranked Viet Nam 8th overall for long-term climate risk amongst the 10 countries most affected from 1996 to 2015. The ranking was based on mortality (death toll, deaths per 100,000 inhabitants), economic impacts (total losses, US\$ PPP; % loss per unit GDP), and total number of events. Viet Nam was second overall, behind the Philippines, in the number of events (206) during the period that occasioned loss of life and economic impacts.

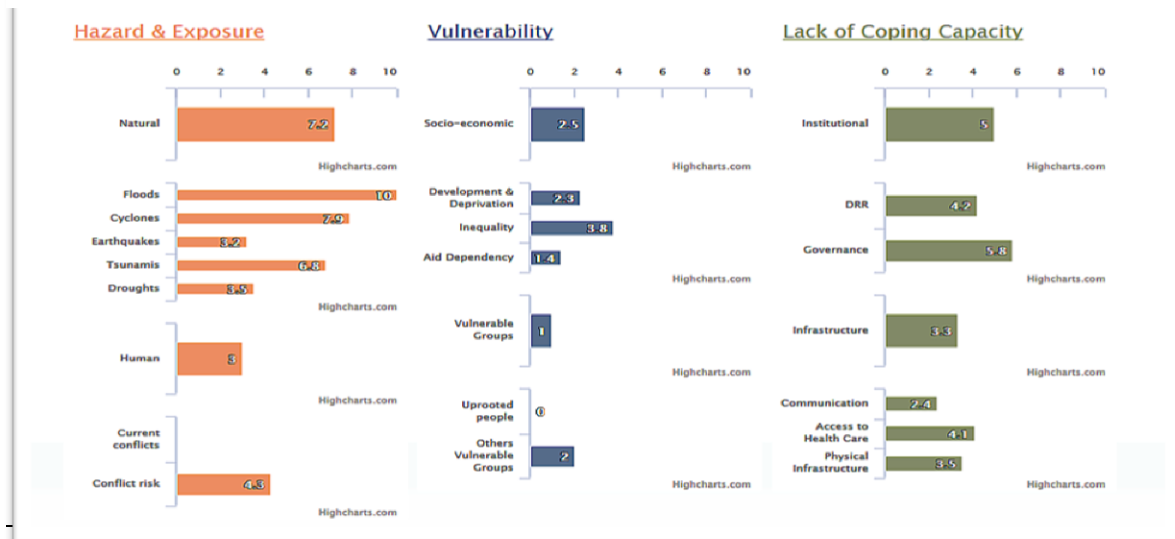
Figure 8 . Relative frequency of disaster hazards

High	Medium	Low
Flood	Rain	Earthquake
Typhoon	Hail	Frost
Cyclone	Landslide	
Flash Flood	Forest Fire	
Tornado	Salinity	
Lightning	Intrusion	
Drought		

Source: CFE-DM. 2015

According to internationally reported statistics²⁸, the top ten disasters in Viet Nam since 1997 have caused 6,246 deaths, affected over 28.6 million people, and resulted in as well as property damage in excess of US\$13.4 billion. In 2017 alone, estimated losses from natural disasters were over US\$2.6 billion; with over 350,000 ha of crops affected. In 2015-2016, the worst drought in almost a century occurred, a direct result of which was saltwater intrusion occurring far inland due to reduced

Figure 9 INFORM Country Risk Profile – risk dimensions and components



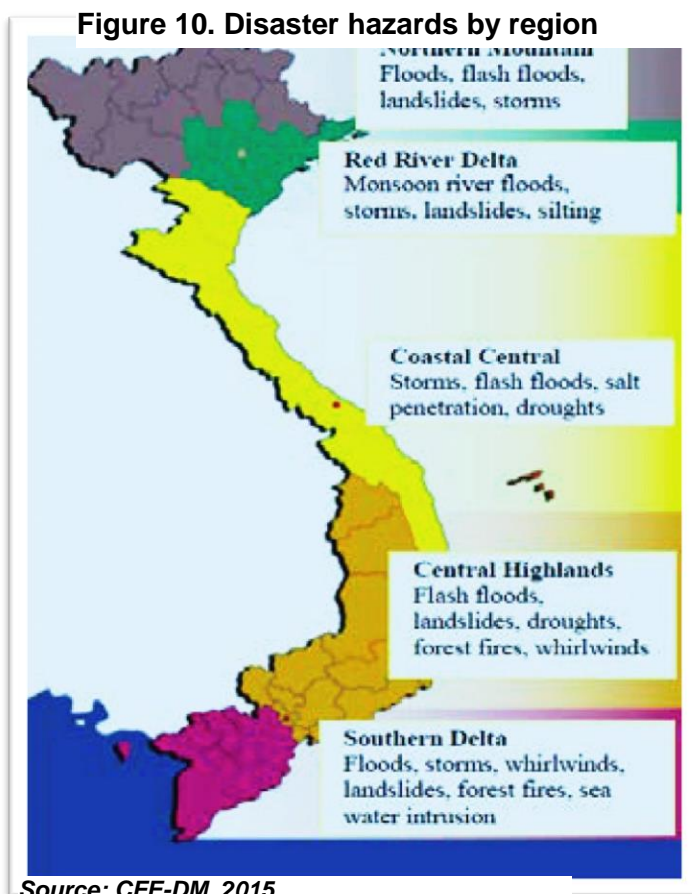
²⁷ United Nations Office for Disaster Risk Reduction (UNISDR) Prevention Web – <https://www.preventionweb.net/countries/vnm/data/>.

²⁸ The Emergency Events Database - Université catholique de Louvain (UCL) - CRED, www.emdat.be, Brussels, Belgium.

Source: <http://www.inform-index.org/Countries/Country-profiles>

stream flows. At its peak, some two million people were left without access to water for consumption and domestic use and an equal number suffered income loss.

Another 1.1 million people were made food insecure, and water-related diseases and acute malnutrition significantly increased. This drought with its associated saltwater intrusion, offer a preview of what could become the new normal and make clear the need to act to ensure the country's economic and societal well-being. According to the Ministry of Agriculture and Rural Development (MARD), 18 provinces in the Central Highlands, South Central Coast, Southeast and Mekong Delta Regions were severely affected. The direct economic losses were estimated at about US\$674 million, representing 0.35% of national GDP and resulting in negative agricultural growth for the first time in decades. The estimated recovery costs for these 18 most-affected provinces is US\$1.2 billion. Climate change is projected to increase the impact of disasters, especially the timing, frequency, severity, and intensity of hydro-meteorological events. Given its high exposure to floods and storms, and the fact that two of its most important economic sectors – industry and agriculture – are in coastal lowlands and deltas – Viet Nam was listed by World Bank as one of the five countries that will be most-affected by climate change. Figure 8 shows the relative frequency (current) of natural disasters in Viet Nam. (CFE-DM, 2015).



The Index for Risk Management²⁹ – a global, open-source risk assessment for humanitarian crises and disasters – rates countries based on hazard and exposure, vulnerability, and coping capacity. Their 2018 Viet Nam Country Risk Profile rates the country as “Medium” risk, based on its high hazard and exposure to natural disasters, but relatively low, overall socio-economic vulnerability and medium-level of coping capacity (Figure 9). Figure 10 shows the principal natural disaster hazards by region.

Climate change impacts and trends

According to the Viet Nam Institute of Meteorology, Hydrology and Climate Change's (IMHE)³⁰ most recently published, updated (2015)

²⁹ INFORM is a collaboration of the Inter-Agency Standing Committee Reference Group on Risk, Early Warning and Preparedness of the European Commission. <http://www.inform-index.org/>.

³⁰ IMHEN is an institution, linked to the Ministry of Natural Resources and Environment, charged with studying and developing Viet Nam's climate change projections and scenarios.

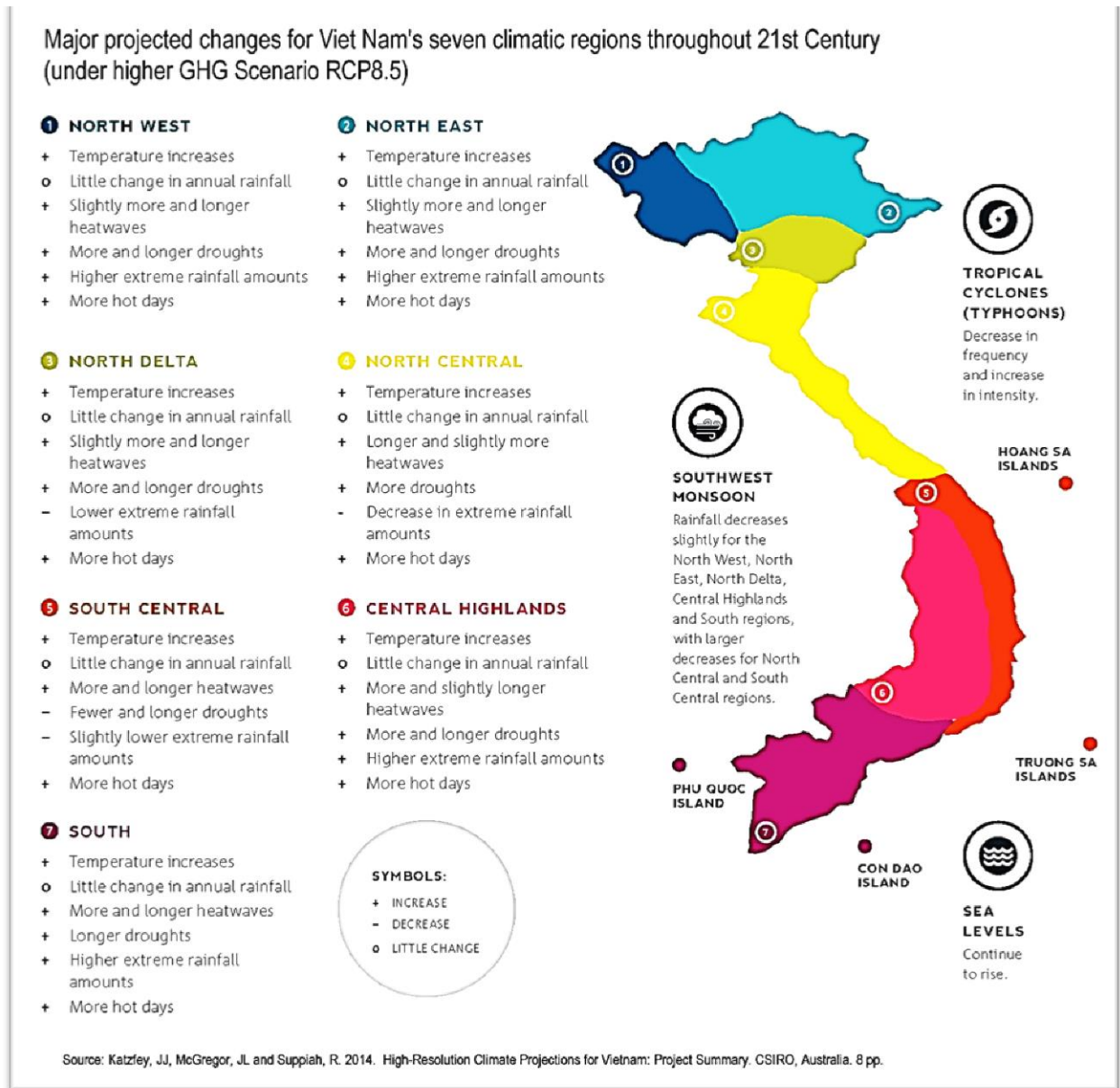
climate change and sea level rise scenarios³¹ indicates that climate change is taking place at a pace faster than previously expected. Also, predictions of future changes, especially under the high scenarios (RCP8.5), are more severe, and there is growing evidence that “worst case” projections may have to be recalibrated as new studies consider greater global economic growth than previously forecast³². According to IMHEN’s 2015 scenarios, under the high emission scenario (RCP8.5), temperature rise at the end of 21st century would reach 4^oC versus the 2012 forecast of 3.7^oC. The same is true for rainfall, with predicted increases of 5-15% (versus 2-10% in 2012) during the rainy season and negative trends in the dry season. Thus, drought and floods are equally predicted to be more frequent and severe. Key conclusions from IMHEN’s recent work include:

- Over the period from 1961 to 2014, the highest maximum temperatures demonstrated an upward trend at most weather stations in the North and a decreased trend at most stations in the South.
- The trend in the lowest minimum temperatures decreased markedly over the entire country.
- The number of cold days showed a decreasing trend at stations in the North and Central Highlands.
- By the end of the 21st century, there will be a very large increase in number of hot days under all scenarios (RCP4.5 and RCP8.5).
- The number of cold days and extreme cold days will decrease across most of the provinces of the North and North Central Coast.
- The trends in maximum 1-day and 5-day rainfall was negative at most stations in the North, whereas the trends were positive in stations in the Central and the South regions.
- The trends in the maximum 1-day and 5-day rainfall will be positive (increase) across the entire country. In general, the rates of change are expected to remain the same from mid- to the end of the century.
- There were no obvious changes in the frequency of tropical cyclones, including typhoons and tropical depressions, making landfall.
- Very strong typhoons are becoming more prevalent, typhoon season is tending to end later, and typhoon occurrence in the southern regions is increasing.
- The number of tropical cyclones in the East Sea and their impacts does not show a clear trend and so is uncertain. However, the number of strong typhoons is expected to increase.
- Expected impacts on water resources include: from 2040 to 2059, annual flow volumes in most rivers will increase; risk of floods and flash floods will increase; drought occurrence and salinity intrusion will increase in the dry season.

³¹ http://imh.ac.vn/files/doc/Phungtrang_E/TranThuc_CC_Scenario_Update.pdf.

³² Recent work on uncertainty in forecasts of long-run economic growth is suggesting that projections of global and regional per-capita economic growth rates through 2100 will be substantially higher than what is being assumed in current studies of climate change impacts, damages, and adaptation. For example, a recent study (Christensen et al, 2018) suggests a greater than 35% probability that emissions concentrations will exceed those assumed in the most severe of the available climate change scenarios (RCP 8.5), illustrating the particular importance for understanding extreme outcomes.

Figure 11. Projected major changes for the seven climatic regions during the 21st Century



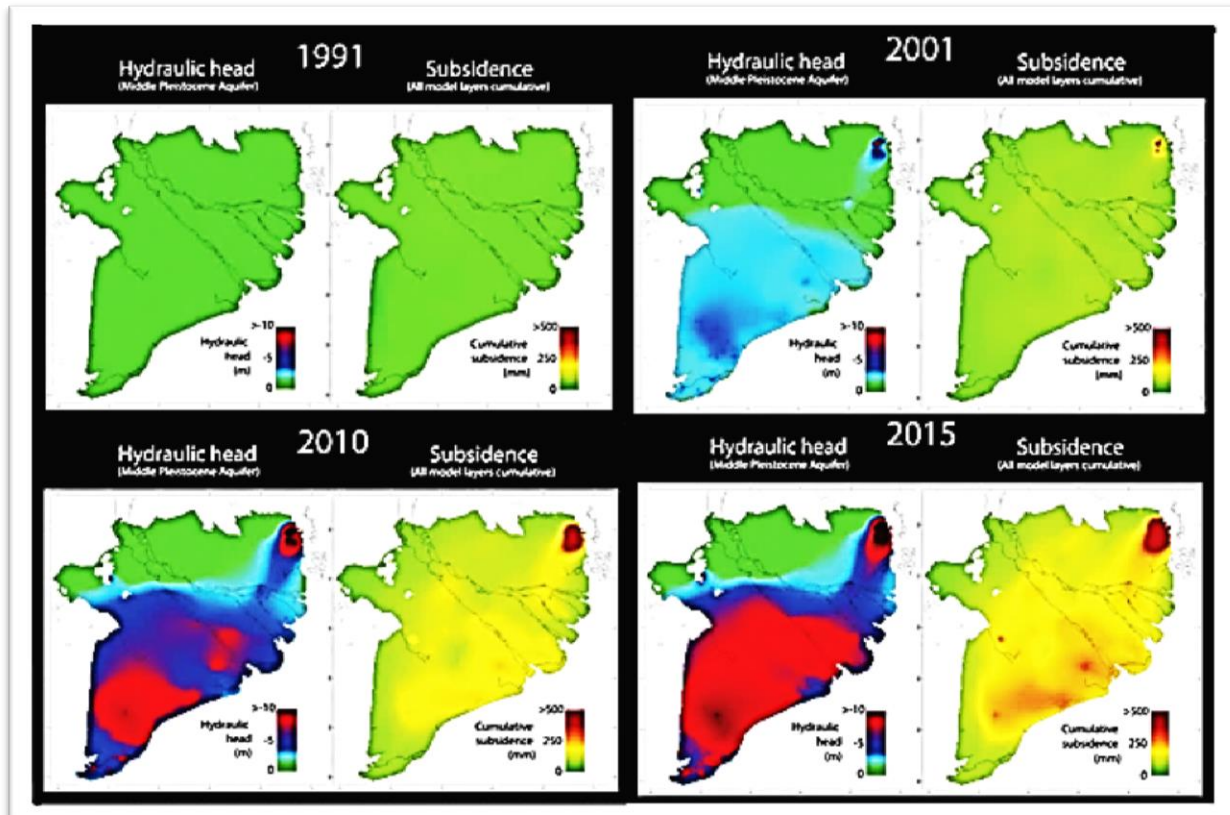
Source: Minderhoud et al, 2017

Figure 11 provides summary of the predicted climate change impacts, down-scaled to the regional levels. It illustrates the major projected changes for Viet Nam's seven climatic regions throughout the 21st Century, under the high greenhouse gas scenario (RCP8.5).

Based on both observations and modelling, sea level rise (SLR) estimates have also been increased. Under the medium emissions scenario level, SLR would reach 83 cm at the end of the 21st century, and under the high emissions scenario it would be 107cm. In result, the estimate of areas that would be flooded is also now larger. A sea level rise of 1m is predicted to inundate about 17.6% of the Red River delta; 1.5% of the Central Coastal provinces (Thanh Hoa to Binh Thuan province); 17.8% of Ho Chi Minh city and 39.4% of the Mekong River Delta (MRD). Kien Giang

province, in the MRD could suffer inundation over 75% of its area. These scenarios are to be updated based on the 5th Assessment Report (AR5) by the IPCC, which study is expected to be released in January 2019.

Figure 12. Mekong River Delta: modelled hydraulic head and subsidence following groundwater exploitation (1991 to 2015)



It is important to note that the scenarios for inundation from SLR do not factor in subsidence. A recent study of subsidence in the MRD (Minderhoud et al, 2017)³³ estimates that between 1991 and 2015 subsidence rates were greater than 500mm in the northeastern portion of the delta, near Ho Chi Minh City and ranged from 200mm to 500mm across most of the delta; an average of 8 mm to more than 20mm per year (Figure 12). Should that rate continue, subsidence would add significantly to SLR by mid-century and occasion catastrophic rises by end of the century.

Threats to agriculture and rural development. Climate change is expressed through extreme weather events and, in Viet Nam, both agricultural sector and rural poverty alleviation efforts and gains are jeopardised by extreme weather events (storms, typhoons, flooding, and drought), and thus the climate change-exacerbated impacts deriving from, among others, sea level rise and salinization, and warming temperatures. Viet Nam has an admirable history of coping with natural disasters and reducing their effects, but the economic and human costs can still be huge. IFAD's target group – the poor – are more vulnerable to these shocks for a variety of reasons. They are more likely to live in areas vulnerable to flooding and other natural disasters, have higher dependence upon agriculture and the natural resources base

³³ <https://www.youtube.com/watch?v=UVCKy3etorw>.

for their livelihoods and well-being, and are less likely to live in well-constructed, permanent homes. Further, as the poor have fewer resources to recover, the impacts of flooding, storms or droughts is usually greater. Inability to pay off debt or take out new loans, increases in local food prices, and illness due to water-borne diseases can all disproportionately affect the poor. Women and men are affected differently by climate change because of the different roles they play in the household economy.

They have different resources with which to perform these roles, including different levels of education, access to power, social norms, access to credit, and ownership of land and other goods. Women are often playing the multiple roles of farming crops, as well as being primarily responsible for providing food, water and fuel for the family, and caring for the sick. All these roles are made more onerous by the impacts of climate change. Table 3 provides an overview of climate change impacts and their associated geographic areas, vulnerable sectors and communities.

Table 3. Areas, sectors and communities vulnerable to climate change.

<i>Climate Change Impact</i>	<i>Vulnerable Areas</i>	<i>Vulnerable Sectors</i>	<i>Vulnerable Communities</i>
Temperature Increase	<ul style="list-style-type: none"> Mountainous Areas: Northern East, Western East and North Central Part Northern Delta 	<ul style="list-style-type: none"> Agriculture and food security Aquaculture Natural ecology systems and biodiversity Water resources Energy (production and consumption) Community health care 	<ul style="list-style-type: none"> Poor farmers Ethnic minorities Senior citizens Children and women
Sea level rise	<ul style="list-style-type: none"> Coastal Areas, especially deltas and flooded areas (Mekong River Delta, Red River Delta, and coastal Central Part) Islands 	<ul style="list-style-type: none"> Agriculture and food security Aquaculture Sea and coastal ecological systems Water resources (surface and ground water) Energy Tourism Residential Space Infrastructure, industrial zones 	<ul style="list-style-type: none"> Coastal communities, especially poor farmers and fishermen Senior citizens children and women
Floods, flash floods, and landslide	<ul style="list-style-type: none"> Coastal Areas (including delta areas and flooded areas: Delta and coastal Northern Mtns, Mekong River Delta and coastal Central Part) Mountainous areas: Northern West, Northern East, North Central Part and Highlands 	<ul style="list-style-type: none"> Agriculture and food security Aquaculture Transportation Water resources Infrastructure Residential Space Health care and life Trade and Tourism 	<ul style="list-style-type: none"> Coastal communities Mountainous communities, especially ethnic minority groups Senior citizens, children, and women
Storms and tropical low pressure	<ul style="list-style-type: none"> Coastal Areas: especially coastal Central Part, Red River Delta and Mekong River Islands 	<ul style="list-style-type: none"> Agriculture and food security Aquaculture Transportation Energy Offshore and coastal activities Infrastructure Place of Residence Health care and life Trade and Tourism 	<ul style="list-style-type: none"> Coastal communities, especially fishermen Senior citizens, children, and women
Droughts	<ul style="list-style-type: none"> Central Part, especially South Central Part Delta and Northern Part Midland Mekong Delta Highlands 	<ul style="list-style-type: none"> Agriculture and food security Water resources Energy (hydro power) Waterways Health care and life 	

Source: MoNRE, 2008

Direct impacts on agricultural production and key crops will result from the projected increases in temperature. In most regions, the number of days when temperatures exceed 25°C is expected to increase significantly, especially in the uplands (North and Central Highlands) while the number of days where temperatures drop below 20°C will decrease significantly. Water demand for agriculture could increase by as much as two or three-fold compared with that of 2000. Tropical plants will tend to shift further north and towards higher altitudes. Shifts in eco-agricultural zones could cause loss of varieties of indigenous breeds or species, although this may also extend the ranges of some crops. Moisture stress in crops will be exacerbated and areas of crops requiring wet or moist conditions will decrease.

Rates of evapotranspiration will also increase, increasing crop water usage and the damaging effects of drought. Total output from spring rice crops is expected to decline more than that of summer crops outputs and significant production losses are expected in the three major grain crops (Table 4). Winter maize productivity may increase in the Red River Delta but decrease in Central Coast and the Mekong River Delta. Yield changes will vary widely across crops and agroecological zones under climate change and estimates of these will also vary depending on assumptions about the impact of increased atmospheric CO₂ concentrations³⁴ and rainfall. An estimate of potential crop yield losses across climatic zones, utilizing alternative scenarios for rainfall³⁵ without CO₂ fertilization, are given in Table 5. A predicted 33 cm rise in sea level by 2050 would increase the area inundated by flooding to a depth greater than 0.5 m by an estimated 276 thousand ha and the area affected by saline intrusion (threshold value equals salinity of greater than 4 g/l) would increase by 420 thousand ha. An estimated 13% – 590,000 ha – of the nation’s rice production area may be lost by 2050. Further yield impacts would result from early crop maturation and/or increased pest and disease pressures. The suitability of different post-harvest and crop storage practices may also be affected, increasing post-harvest losses.

Overall, in the absence of adaptation measures, yields will likely be reduced for rice, maize, cassava, sugarcane, coffee, and vegetables. Impacts are predicted to be more significant under dry scenarios than wet ones. Hydrologic changes and sea level rise will affect the availability of fresh water or even physically change the agricultural landscape. Climate change may also threaten the growth and reproduction of livestock and increase the incidence and spread of diseases.

Table 4. Potential impacts of climate change on three main crops (medium emission scenario)

Item	Up to 2030		Up to 2050	
	Quantity (1000 ton)	Rate (%)	Quantity (1000 ton)	Rate (%)
1. Rice	-2,031.87	-8.37	-3,699.97	-15.24
1.1. Reduction due to natural disaster	-65.27	-0.18	-65.27	-0.18
1.2. Reduction due to change in potential yield	-1,666.6	-8.10	-3,634.7	-14.97
- Spring rice	-1,222.8	-7.93	-2,159.3	-14.01
- Summer-autumn rice	-743.8	-8.40	-1,475.4	-16.66
2. Maize	-500.4	-18.71	-880.4	-32.91
3. Soybean	-14.38	-3.51	-37.013	-9.0

Source: *Nguyen Van Viet, 2011*

³⁴ Fertilization by increased CO₂ levels should theoretically increase yields. But, its potential role is both contentious and difficult to estimate since it will depend ultimately on which factors constrain plant growth. Estimates of yield losses, without accounting for CO₂ fertilization, thus provide an upper bound for potential losses.

³⁵ Given the uncertainty of impacts on rainfall, it is useful to look at both wetter and drier scenarios for Viet Nam. The predicted impacts on crop yields from the driest (IPSL-CM4) and the wettest (GISS-ER) show significant differences from MoNRE’s medium emission scenario.

Table 5. Potential impacts of climate change on 2050 crops yields using IPSL-CM4 (driest), GISS-ER (wettest) and MONRE's medium emission scenarios.

Agroecological zone	Potential impacts of climate change without adaptation
North-West	Rice yield declines by 11.1 percent to 28.2 percent; yields of other crops decline by 5.9 percent to 23.5 percent. Generally, the Dry scenario results in more yield reduction than the Wet scenario. MoNRE scenario has the least yield reduction.
North-East	Rice yield declines by 4.4 percent to 39.6 percent; yields of other crops decline by 2.7 percent to 38.3 percent. The largest yield reduction can be with either the Dry or Wet scenarios, depending on crops. MoNRE scenario has the least yield reduction.
Red River Delta	Rice yield declines by 7.2 percent to 32.6 percent; yields of other crops decline by 4.1 percent to 32.9 percent. The largest yield reduction can be with either the Dry or Wet scenarios, depending on crops. MoNRE scenario has the least yield reduction.
North-Central Coast	Rice yield declines by 7.2 percent to 32.6 percent; yields of other crops decline by 4.1 percent to 32.9 percent. The largest yield reduction can be with either the Dry or Wet scenarios, depending on crops. MoNRE scenario has the least yield reduction.
South-Central Coast	Rice yield declines by 8.4 percent to 27.0 percent; yields of other crops decline by 4.0 percent to 20.9 percent. Generally, the Dry scenario results in more yield reduction than the Wet scenario. MoNRE scenario has the least yield reduction.
Central Highlands	Rice yield declines by 11.1 percent to 42.0 percent; yields of other crops decline by 7.5 percent to 45.8 percent. The largest yield reduction can be with either the Dry or Wet scenarios, depending on crops. MoNRE scenario has the least yield reduction.
South-East	Rice yield increases by 4.3 percent in the dry scenario, remains the same in the wet scenario, and declines by 8.8 in the MoNRE scenario. Yields of other crops decline by 3.0 percent to 22.7 percent. The largest yield reduction can be with any of the three scenarios, depending on crops.
Mekong River Delta	Rice yield declines by 6.3 percent to 12.0 percent; yields of other crops decline by 3.4 percent to 26.5 percent. The largest yield reduction can take place under any of the three scenarios, depending on crops.

Source: World Bank, 2010

GHG emissions from agricultural sector. Viet Nam's GHG profile is dominated by emissions from energy and agriculture, which combined contribute 89% of total GHG emissions (USAID, 2016). According to the World Resources Institute Climate Analysis

Table 6. Agricultural sector GHG emissions (2013) by subsector (units = ktCO_{2e})

Categories	CH ₄	N ₂ O	Total
Total	59,131.2	30,276.7	89,407.8
4.A. Enteric Fermentation	10,328.1		10,328.1
4.B. Manure Management	2,087.6	5,816.5	7,904.1
4.C. Rice Cultivation	44,741.7		44,741.7
4.D. Agricultural Soils	0.0	24,044.9	24,044.9
4.E. Prescribed Burning of Savannas	1.0	0.1	1.1
4.F. Field Burning of Agricultural Residues	1,972.9	415.0	2,387.9

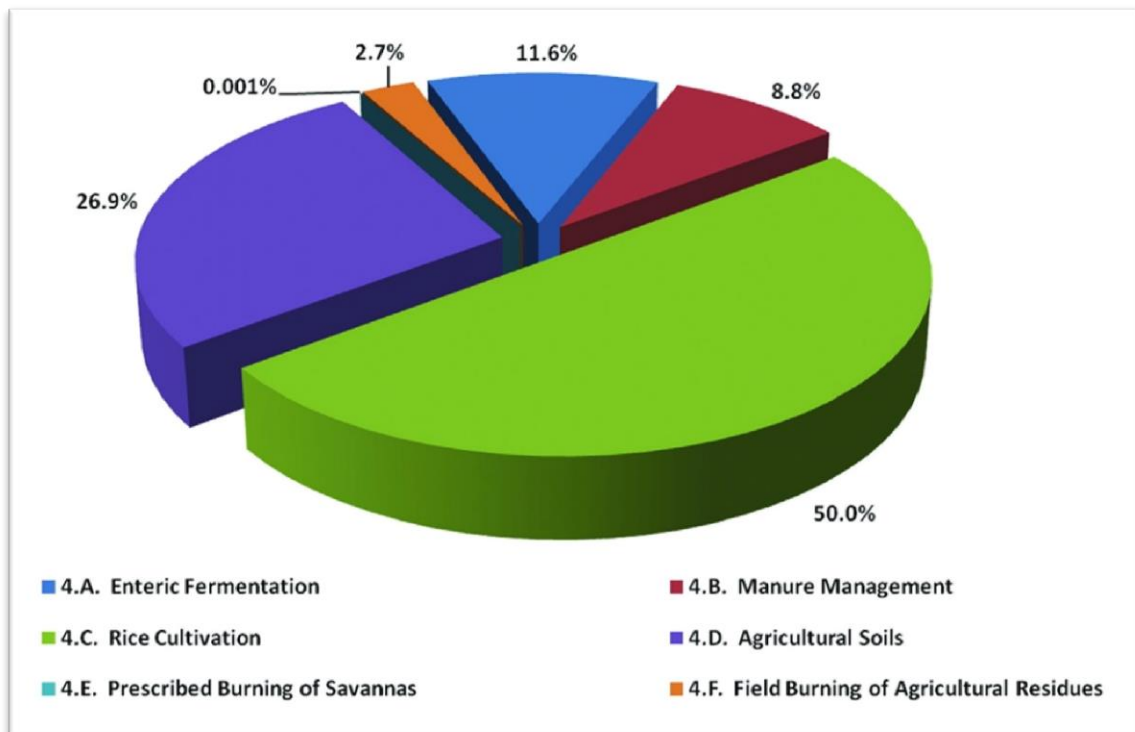
Source: GoV, 2017

emissions (USAID, 2016). According to the World Resources Institute Climate Analysis Tool (WRI, 2018)), energy is by far the highest emitting sector, accounting

for 66 % of Viet Nam 's total annual GHG emissions, followed by agriculture, which accounts for 23% of the total.

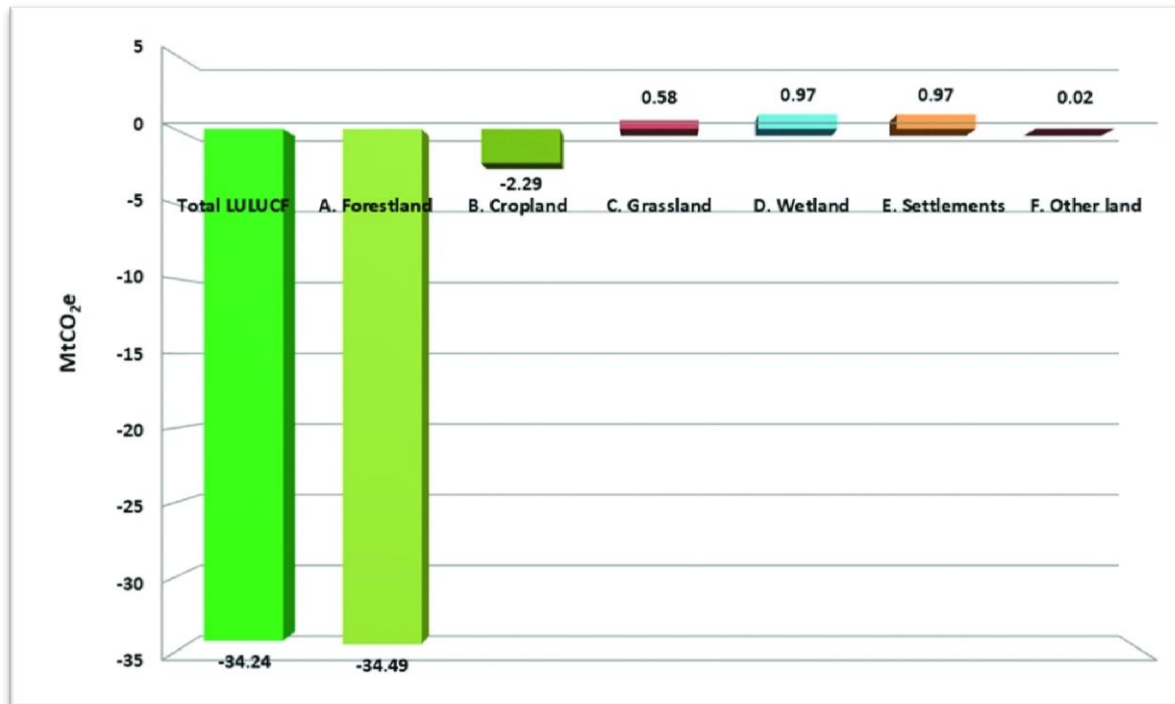
According to the *Second Biennial Updated Report of Viet Nam to the United Nations Framework Convention on Climate Change* (GoV, 2017) GHG emissions from the agriculture sector were 89.4 MtCO₂e in 2013. Table 6 and Figure 13 show the breakdown of the contributions from the various sub-sector. Emissions from rice cultivation contributed the largest share (50%). The second largest share comes from agricultural soils, followed by enteric fermentation, manure management, burning of agricultural residues, and lastly a small amount from prescribed burning of savannas.

Figure 13. Contributions to agricultural GHG emissions by sub-sector



Source: GoV, 2017

The land use/land use change and forestry (LULUCF) is a net sink, absorbing more emissions than it releases, due primarily to activities in the forest subsector. The total 2013 GHG emission/removal in LULUCF was 34.2 MtCO₂e (GoV, 2017). Among the total 2013 GHG emissions/removals, Forest Land and Cropland are the sub-sectors that absorb the highest emission of CO₂e, with 34.5 MtCO₂e and 2.3 MtCO₂e, respectively. Those sub-sectors emitting CO₂e are: grasslands, wetlands, settlements, and other lands, as presented in Figure 14. (GoV, 2017).

Figure 14 Figure 10. LULUCF is a net carbon sink.

Source: GoV, 2017

National policies

Agriculture restructuring and planning of major commodities. For the last 30 years, the agriculture of Viet Nam has been developed based on exploiting natural resources, overusing input and taking advantage of cheap labor. That model can no longer work due to these critical resources – land, labor, capital - are quickly transferring to other more profitable non-agriculture sectors while the overuse of input is increasing production cost and reducing farmers’ profits. Moreover, this practice also has serious impact on the environment such as reduction of biodiversity, degradation of natural resources, and pollution of environment condition. The Government of Viet Nam’s Agriculture Restructuring Program (ARP) was approved on July 2013 in order to maintain high growth rates and competitiveness, ensure food security, improve income of rural people while reducing negative impacts on environments. A revised action plan (Decision 1819) has been also issued recently on November 2017 with strategic contents in order to guide the ARP implementation in nationwide scale effectively.

The specific objectives of ARP to 2020 is to maintain agriculture GDP at 3% annually, increase labor productivity by 3.5% annually, reduce agriculture labor by 40%, achieve the rate of trained agriculture labor by 22%, and improve the income of rural labor by 1.8 times compared to 2015, etc. To show the strong linkage between the NTP-NRD and the ARP, other targets related to the NTP-NRD was also set such as 50% communes earned New Rural Commune title and 15,000 cooperatives operate effectively. In order to achieve those targets, under the ARP implementation, the commodities would be reviewed and classified into three categories: the national strategic commodities, the provincial strategic commodities and local specialties. Based on this list, each province will develop their own ARP implementation plan with policies and solutions to build up the value chains. The ARP also provide main direction for crop, aquaculture and farming practice for each eco-region in order to

mobilize and effectively use of resources, response to climate changes, and ensure the inter-regional cooperation of provinces. These contents of the ARP are in line with the current activities of IFAD in project provinces.

After four years of implementation, some achievements have been made. Thousands of hectares of low-effective paddy land have been transferred for other crops, and hundreds of thousands of hectares of a "larger scale rice field model" have been established, most in the Mekong Delta region. The fruit and vegetable sector have demonstrated impressive growth with export value of US\$ 2.5 billion in 2016. Some value chain models in sub-sectors were established where farmers and companies have better cooperation from production to processing and trading. MARD has approved six sub-sectorial restructuring plans to direct the ARP in crops, livestock, forestry, aquaculture, irrigation and processing. Six institutional transformation plans were also approved to comprehensively improve state management, and the quality of policies, public investments, R&D, and human resources. Still, overall the implementation of the ARP has been slow, and achievements to date modest.

For the 2021 to 2025 period, the government intends to continue with the ARP as a priority program and facilitate the implementation of a series of strategic policy changes, including allowing the continued reduction in paddy land and its conversion to other, more profitable, crops; simplifying administrative procedures to promote export, and provide various incentives to investors in agriculture.

However, challenges remain. Despite the government's determination, the average annual growth rate of the sector remains below the 3.0% target and ARP implementation was strong and synchronized in some provinces while it was slow in others. The practice of unsustainable use of natural resources to subsidize development remains. The needed breakthrough policies for mobilizing resources (land, capital, and technology) to support the ARP are still missing and institution transformation has been very slow. Structurally, the agriculture sector continues with smallholder farms as the main production unit, and micro- and small enterprises as the main players in the agricultural commodity supply chains. Nor has the rapid development of infrastructure and manufacturing appear to be expediting the development and transformation of agriculture.

Medium-term land use planning for major commodities. MARD has prepared plans for each major commodity, based on concepts of competitive advantage and market demand and attempting integrate other factors such as climate change and sustainable utilization of natural resources. The major thrusts are to transform a portion of current rice land into other, more remunerative cash crops, fruit trees or aquaculture, and shift out of annual to perennial cropping on more fragile lands (e.g., slopes and uplands) as well as increase coverage and quality of plantation forests. Targets include reducing total rice areas (occupying 52% of all cultivated lands) by 6.7%, increasing grasslands for livestock feed; reduce coffee and rubber areas while increasing area under tea; increase area under fruit and nut production areas. Fish farming and offshore fishing are also to be promoted. In forestry, some 0.5 million of forest plantations are to be developed, together with improving the quality of forest promoting biodiversity. Table 7 summarizes the crop area targets specified in the plan.

Agriculture development toward 2035. According to the Strategy for Development of agriculture and rural areas of Viet Nam, the objective until 2030 is to develop agriculture into a major, strategic export sector. The specific development targets are:

- Maintain annual growth rate of 3 to 3.2% in agricultural GDP, increase value-added processing/agribusiness by 35%; and achieve a US\$ 65 billion agricultural exports turnover.
- Promoting specialized agriculture zones and establish agroindustry-service clusters with modern infrastructure.

Table 7. The approved targets for agricultural land planning for each commodity until 2020 (units = thousand ha)

Crop	2017	2020
Rice	4,030	3,760
Grassland (for livestock)	140	240
Other annual crops	2,730	2,780
Tea	129	134
Coffee	664	650
Rubber	971	960
Cashew Nuts	297	400
Pepper	152	130
Fruit trees	923	970
Fish farming	749	768
Forestry	15,700	16,245
Forest coverage (%)	41.45	42.89

Source: IPSARD calculation based on strategies of MARD

- Transform agriculture and rural sector to meet market demand for high-quality products, improving food hygiene and safety.
- Develop the rural service industry in order to absorb rural labor; decrease agricultural labor to 30% of total labor.
- Eradicate poverty in rural areas and improve rural residents income and nutrition.
- Enhance climate change adaptation capacity and promote the application of “green agriculture” and maintenance of environmental services.
- Maintain forest coverage at 44-45%, while improving the forest quality and resource protection.

By 2035, Viet Nam envisions a solid foundation for sustainable and efficient growth. This would include a proactive approach to protecting natural resources and the environment, high levels of energy efficiency, and shielding the country from the worst effects of global climate change. Under this scenario Viet Nam would meet most, if not all, of its international commitments to lower greenhouse gas emission, achieve green growth and maintain ecological balance.

In line with the UN Agenda 2030 for Sustainable Development (which includes the Sustainable Development Goals), and for addressing climate change, Viet Nam has issued a series of strategies and action plans (e.g., 2015 INDC, 2016 Plan for the Implementation of the Paris Agreement, and Green Growth Strategy Pathway To Implement Nationally Determined Contribution). Three key action areas stand out among these:

- Improving governance through building strong institutions that are well coordinated and effective in monitoring and enforcing policies;

- incentivizing private sector investments; and
- providing relevant and robust information that is publicly accessible.

Under a more recent initiative, which is part of government's "Industry 4.0"³⁶ vision, the Ministry of Agriculture and Rural Development (MARD) is promoting the concept of "SMART Agriculture" for inclusion in future agricultural development programs. An example of how this concept is being implemented is the World Bank-supported initiative to allow farmers to use smart phones, paired with automated sensors in their fields, to monitor water and soil moisture levels in their rice paddies. This avoids over and unnecessary use of water. When and as needed, farmers can use smart phones to trigger the pumping station. This degree of control should increase agricultural productivity, conserve water, and reduce GHG emissions from rice production.

National Target Program for New Rural Development. The National Target Program on New Rural Development (NTP-NRD) was established by Decision 800/QĐ-TTg in June 2010. The goal was to develop the comprehensive development of rural communes, in economic, cultural, environmental, social and public security terms. The first phase in 2011-2015 had the goal that 20% of communes in the country would achieve "new rural commune" status³⁷. The NTP-NRD is the most important rural economic development program. At the end of the first phase, the biggest success of the program was infrastructure development (especially roads and irrigation works).

A joint evaluation of the program by IFAD and World Bank (2016) concluded that while the program had noteworthy achievements, it was too infrastructure-focused and thus heavily reliant upon local government budgets. In results, the arrears of 53 of Viet Nam's 63 provinces reached VND15,000 billion (≈US\$ 690 million) and a number of communes faced loss of liquidity. Management was top-down, undermining the potential to mobilize community interest and resources. The lack of effective local participation during planning and implementation also lead to inefficiencies, quality and maintenance issues of the infrastructure works. Meanwhile, activities related to income improvement and agriculture development received relatively little attention and investment. Ultimately, the program's first phase did not have the desired impacts in rural development and peoples' quality of life. The better-off communes became obsessed with meeting the criteria while poorer communes fell into the habit of just relying on government's continued support, i.e., "rural development" came to be considered as "government's program" instead of their own.

Phase two from 2016 to 2020 has introduced changes to the design in response to the lessons learned and issues that arose in the first phase. The main objectives remain to improve the living conditions of local peoples and establishing a more effective and efficient rural development structure and production systems, however, the implementation arrangements have been adjusted to be more flexible and allow

³⁶ The Fourth Industrial Revolution is characterized by a fusion of technologies, which blur lines between the physical, digital, and biological spheres. It is marked by emerging technology and breakthroughs in a number of fields, including robotics, artificial intelligence, nanotechnology, quantum computing, biotechnology, the Internet of Things, the Industrial Internet of Things (IIoT), fifth-generation wireless technologies (5G), additive manufacturing/3D printing and fully autonomous vehicles. These technologies are disrupting almost every industry in every country, and the breadth and depth of these changes are seen as transformational for all systems of production, management, and governance. As such, this fourth wave is has a high potential of disruptive effects.

³⁷ To achieve this, there are 19 criteria, falling into 4 groups that must be met. The first group of criteria deal with production, income and household poverty rate. The second group criteria are on education, health care and culture. The third group of criteria deal with environmental protection. The fourth group of criteria regards crime rates and public safety administration.

the tailoring of the program to better fit local contexts, needs and priorities. In particular, provincial governments are to establish suitable criteria and promotion of productive developments and income improvement are prioritized along with the infrastructure investments. Also, a wider range of activities are supported. The Program emphasizes alignment with the goals of the Agriculture Restructuring Program (ARD), including the facilitation of the development of cooperatives and private sector investment in agriculture; and the strengthening of existing value chains as well as the establishment of new value chains for strategic commodities. This new direction pairs well with IFAD's value chain development activities in project provinces. The role of communities in the implementation is also to receive high attention, with implementation at village-level instead of commune level as in the previous period.

Ethnic Minority development policies and programs. Over the years government has established and implemented many different policies to support ethnic people's development. Implementation has been through government's major programs for poverty reduction, agriculture development, new rural development, etc. However, all policies – social well-being (social payment, water, healthcare, legal support), human development (education, vocational training) to production promotion policies (land assignment, preferential loan, extension, etc.) – have been mainly delivered as traditional welfare programs. In hindsight it is now understood that while such programs are extremely important safety nets for some vulnerable segments of society, as a generalized practice they can create dependency, undermine social capital of traditional communities, and simply substitute for internal resources of the community without promoting desirable (to the community) forms of social and economic development. Further, as the main instruments reaching the very poor, for those people who wished to increase their agriculture production to escape poverty, the supporting policies were inadequate. Given the persistence of high levels of poverty in certain regions and amongst specific ethnic peoples despite many programs that have targeted ethnic minority poverty, one may conclude that the policies and programs have helped some but have left many behind. And, for those left behind, apparently these policies and programs are ineffective.

For the period 2016-2020, policies for ethnic minorities' development adopted some major changes. In order to ensure the effectiveness of the support given, as well as incentivize ethnic peoples' communities to invest internal resources for self-development, the policy framework follows certain basic principles as regards economic/productive development assistance: (i) no unconditioned provision of benefits and loans instead of grants; (ii) instead of direct monetary assistance, provide opportunities for development; (iii) instead of an input-driven provision of support, the concept is to provide incentives to mobilize the efforts of communities; and (iv) support to communities, not individuals. Further, the intention is to have in place stable policies and approaches over the long-term to facilitate amongst the clientele the development of long-term visions and enable step-wise efforts over time, instead of trying to maximize short-term gains through maximizing access to publicly-financed programs. Lastly, given the increasingly limited resources foreseen as being available³⁸ in coming years, the government aims at strongly focusing its supports in breakthrough contents to create change – especially the support to of the government should only serve as a catalyst to promote the participation of the poor and private sector in the development process.

³⁸ As a MIC, Viet Nam no longer receives the kinds of concessional loans and grants it utilized in past years to supplement national budgetary resources. Further, Viet Nam is currently going through a period of seeking to reduce its deficit that has grown beyond what is allowed by law.

The Committee for Ethnic Minority Affairs (CEMA), in cooperation with the World Bank, is in the process of carrying out a series of studies that would lead to further refining policies for ethnic groups. The end result is to be two policy domains: general policies for all (or most) ethnic groups and specific policies tailored to individual ethnic groups. For general policies, CEMA is reviewing existing policies to eliminate overlap and duplication and design new policies, programs and approaches for infrastructure, improving conditions and opportunities for productive activities (e.g., land allocation, preferential loans, roll out of promising R&D results, farmer/producer organization, trade promotion, etc.); improve labor productivity and quality of human resources; and effective engagement of communities into the development process.

Currently, government's principal program that is targeted to poverty amongst ethnic minorities is the Sustainable Poverty Reduction Program (NTP-SPR), which is administered by CEMA. The program supports infrastructure development, livelihoods, basic services and capacity building for the country's 94 poorest districts and 310 communes in coastal areas, through five sub-programs. The ongoing phase of the NTP-SPR (2016-2020) also has four ambitious objectives for its area of operation. These are: (a) lowering the poverty rate by an average of 1.5 per cent per year; (b) improving the livelihoods and quality of life for the poor by increasing per capita income of poor households by 1.5 times from 2015 to 2020; (c) implementing poverty reduction mechanisms and policies in a consistent and effective manner to improve the living conditions and enhance access to basic social services for the poor; and, (d) investing in the infrastructure of poor districts, communes and villages with special difficulties, in alignment with NTP- NRD criteria.

Climate Change. Viet Nam signed the UNFCCC in 1992 and ratified it in 1994; signed the Kyoto Protocol (KP) in 1998 and ratified it in 2002; set up a National Steering Committee to implement the UNFCCC and KP; submitted to the UNFCCC Secretariat its Initial National Communication (2003), the Second National Communication (2010), and the Initial Biennial Update Report (2014), reflecting the latest climate change response efforts and GHG inventories.

In 2008 and 2012, the Government issued the National Target Program to Respond to Climate Change (NTP-RCC) in order to assess climate change impacts and develop adaptation and mitigation measures. The government also developed a coordination platform called the Support Program to Respond to Climate Change (SP-RCC), which is charged with supervising climate change activities as well as developing climate-change related policies. In early 2017 *the Prime Minister approved the National Target Programme for Climate Change Response and Green Growth for the 2016-2020 period*. The aim is to: (i) enhance country-wide capacity to respond to climate change; (ii) implement measures to adapt to the negative impacts of climate change and reduce greenhouse gas emission; (iii) strengthen people's capacity to adapt to climate change; (iv) "green growth" through development towards a low carbon economy; and (v) enhance the sustainability of economic development through mainstreaming of "natural capital enrichment" into development efforts. A number of urgent priority projects to deal with the impacts of natural disasters in the context of climate change were included for the Mekong Delta, the Central Highlands, the coastal provinces and the Northern provinces.

Climate change concerns were included into the National Socio-Economic Development Strategy (2011-2020) and Socio-Economic Development Plan (2011-2015), as were policies on disaster risk reduction, coastal zone management, and energy supply and use. Economic sectors and provinces developed Action Plans to respond to climate change.

In 2011, the National Climate Change Strategy was issued, outlining the objectives for 2011-2015 and 2016-2050, and priority projects to be implemented in the period of 2011- 2015. The strategy identifies climate change responses that are considered priority for the country.

In 2012, the National Green Growth Strategy was approved, which includes mitigation targets and measures; and regulations on linking with international carbon markets. In 2013, the Law on Natural Disaster Prevention and Control was enacted, aiming to address the diverse natural hazards that affect the country, which are primarily climate risk-related. The 2014 Law on Environment includes a section on climate change.

In September 2015 Viet Nam submitted its Intended Nationally Determined Contribution (INDC) to the UN Framework Convention on Climate Change (UNFCCC). The INDC³⁹ (GoV, 2015) was developed for the COP21, held in Paris in December 2015. It defines the Republic of Viet Nam's commitments under the Paris Accords⁴⁰ and describes the priority actions and outputs that government has established for climate change mitigation and adaptation during the current mid-term plan (until 2020) and beyond (2021-2030). As the currently proposed would bridge these two periods, its timing is strategic to, one, assist the project provinces to fill key, existing gaps for meeting the INDC's shorter term priorities (to 2020), and two, to assist in positioning them for meeting the medium-to-long term priorities.

Relevant to this discussion, the INDC establishes as key areas to be addressed for climate change adaptation during the period until 2020, the following:

- Policies and institutions: Ineffective coordination between line ministries, sectors and localities limit the ability to address multi-sectoral and inter-regional issues. Incentives are lacking to mobilise the private sector to participate in climate change adaptation.
- Capacity: There is a shortage of experts and technical staff who are specialised in climate change and in assessment of the effectiveness of adaptation measures, particularly at the local level. There are significant limitations in communication and awareness-raising on climate change. Needs are largely unmet for forecasting disasters and early warning and greater efforts are needed in the area of scientific research on climate change and adaptation technologies. Appropriate climate change adaptation models for the community level need to be systematized and replicated. Capacities are limited for selecting appropriate climate change adaptation activities and for prioritising resources for their implementation.
- Finance: State resources can only meet 30% of the adaptation needs.
- Technology: A shortage exists of advanced technologies for hydrological and meteorological monitoring and forecasting, early warning of natural disasters and hazards, and climate change adaptation.

The INDC's climate change adaptation priority actions for the period 2021-2030 are primarily those which aim to minimize the loss of life and property due to climate change. Those identified to be of greatest relevance to IFAD are:

Respond pro-actively to disasters and improve climate monitoring:

³⁹ INDC/Viet Nam. (www4.unfccc.int/ndcregistry/PublishedDocuments/Viet%20Nam%20First/VIETNAM%27S%20INDC.pdf).

⁴⁰ Viet Nam signed the Paris Accord on April 22, 2016, after its ratification by government in the month prior on March 11, 2016.

- Produce Socio-Economic Development Plans based on climate change scenarios.
- Modernize the hydro-meteorological observatory and forecasting system to ensure the timely forecasting and early warning of weather events.
- Implement disaster prevention plans and measures to protect peoples' lives, especially in areas affected frequently by storm surges, floods, riverbank and shoreline erosion, or areas at risk of flash floods and landslides
- Allocate and mobilize resources for community-based climate change adaptation and disaster management
- Raise awareness and build capacities for climate change adaptation and disaster risk management.
- Ensure social security:
- Review, adjust and develop livelihoods and production processes that are appropriate under climate change conditions and are linked to poverty reduction and social justice.
- Develop mechanisms, policies, and strengthen the insurance system, and share climate and disaster risks.
- Improve regulations and technical standards for infrastructure, public facilities and housing that are appropriate under climate change conditions.
- Implement community-based adaptation, including using indigenous knowledge, prioritizing the most vulnerable communities;
- Implement integrated water resources management, and ensure water security;
- Ensure food security through protecting, sustainably maintaining and managing agricultural land; restructuring of crops and livestock; create new climate change resilient varieties; and complete the disease control and prevention system.
- Build capacity, transfer technology and finance climate change adaptation:
- Strengthen the capacity to adapt to climate change at local level.
- Technology transfer: (i) technology for real-time forecasting, early warning, and sharing information system on real-time hydro-meteorological monitoring; (ii) tools to assess climate change impacts, vulnerability, exposure and climate change adaptation measures; (iii) technology for the sustainable use of water resources, and prevention of water pollution; (iv) technology to prevent erosion and protect the coastline and riverbanks; and (v) technology for sustainable agriculture, forestry and aquaculture production, and to develop new varieties that are more resilient to climate change.
- Finance for climate change adaptation, including social-economic development in the context of climate change; and encourage and create favorable conditions for private sector investment in climate change adaptation activities.

It is clear that the determination and commitment of government to respond to climate change is very strong. Equally strong has been the support of international community to support this agenda. Year-on-year, the donor community has continued to commit to provide literally hundreds of million USD for deploying climate change mitigation and adaptation actions. Still, while a very significant body of knowledge, strategy, and instruments, systems and technologies have been developed and are being deployed through GoV's programs, local governments and

communities and affected persons remain with little awareness of these programmes and their implications. In result, mitigation and adaptation by local governments and communities remains largely uncoordinated, with different agencies initiating isolated efforts to build resilience and adapt to and mitigate weather risk and natural disasters within the context of climate change. Resulting in very limited impact and ensuing sustainability issues. In addition, farmers and local government have received limited coordinated support from central government hence they seek out more short-term countermeasures and fixes, rather than deploying long-term mitigation actions. For example, central government wishes to promote amongst farmers in specific locations, a switch-over from traditional paddy rice to other resistant rice or to shrimp farming, however, the existing irrigation infrastructure and systems cannot support a change over to the new, more precise water management regimes needed to facilitate the changes and no reliable resistant varieties are yet available.

The lack of cooperation and coordination is a major drawback. Despite the fact that climate change is a cross-cutting issue, the ministries have still failed to work together in developing and deploying unified climate change adaptation/mitigation action plans.

Viet Nam's National Green Growth Strategy and Action Plan. The National Green Growth Strategy (NGGS) was approved in 2012⁴¹. It has been described as “a strategy to promote the process of restructuring and improving economic institutions towards more efficient use of natural resources, improved competitiveness of the economy [which]...will contribute to responding to climate change, reducing GHG & poverty and ensuring sustainable economic development.” (Nguyen Tuan Anh, 2017)

The NGGS is structured around three strategic tasks:

- Reducing the intensity of GHG emissions and promoting the use of clean and renewable energy. Specifically, to reduce by 2020 the intensity of greenhouse gas emissions by 8-10% as compared to the 2010 level, and with international support, an additional 20%; as well as reduce energy consumption per unit of GDP by 1-1.5% per year;
- Greening production, including a “clean industrialization” strategy, encouraging the development of green industry and agriculture, investing in green technologies and equipment, increasing investment in natural capital, and pro-active prevention and treatment of pollution;
- Greening lifestyles and promoting sustainable consumption, including rapid and sustainable urbanization while living in harmony with nature in rural areas and establishing sustainable consumption behaviors. (Meesen *et al*, 2015; Nguyen Tuan Anh, 2017)

Subsequently, in 2014 the National Green Growth Action Plan (NGGAP) was launched; it structured and prioritized actions for the implementation of the NGGS⁴². The principal focus up to 2020 is to achieve the integration of green growth objectives within planning processes and strengthen the related legal and institutional frameworks. Each province is required to develop their local green growth action plans based on their own specificities. Amongst others, implementation also includes the design of national green investment guidelines and the

⁴¹ Decision No. 1393/QĐ-TTg dated Sep. 25, 2012 on the approval of the National Green Growth Strategy of Viet Nam.

⁴² Decision No. 403/QĐ-TTg dated March 20, 2014 on the approval of National Green Growth Action Plan of Viet Nam.

establishment of a funding entity to finance green projects and access international climate finance⁴³. (ibid.)

Implementation of the goals for GHG emissions to which Viet Nam committed to under its INDC (GoV, 2015) are integrated into the NGGS and NGGAP, so that these are the vehicle for INDC implementation, as well. The Green Growth Strategy targets and action plans demonstrate Viet Nam's strong commitments to implementing the INDC obligations proposed for Viet Nam. Achieving these targets and goals are foreseen as requiring a wide range of support, both from national and international sources. Amongst others, it is desired that the banking sector play an important role in mobilizing financial sources, particularly from private sector, for successful implementation of NGGS. Of the US\$ 21 billion estimated to implement the NGGS (see Figure 15), 70% is to come from the private sector.

The agricultural sector's GHG reduction targets are by far the largest and the most reliant on international support. The target financing for the agricultural sector alone represents 27% of the committed (self-executing) finance, but 68% of the international support being sought.

Source: Nguyen Tuan Anh, 2017

ODA financing policies. After decades of relatively high levels of public investment, including from ODA concessional loans, low middle income Viet Nam, is facing a changing development finance landscape. This comes at the same time, that public debt has exceeded the public debt ceiling set by the National Assembly, while its need for development finance remains very high (Pincus, 2017).

⁴³ The "Viet Nam Green Growth Strategy Facility" was established in 2014 within the Ministry of Planning and Investment with support from Belgium and a total of €5.5 million in financing. The facility is currently being tested through provincial-level pilot "green growth projects", examples of which include "*organic mushrooms production using agricultural residues and climate-friendly techniques*", "*water-efficient irrigation techniques leading to a reduction of fertilizer-related greenhouse gas emissions*", and "*solar photovoltaic powered light emitting diode lighting*". (UNFCC, 2018).

Figure 15. Viet Nam's Nationally Determined Contribution

Sector	Modality	Reduction target by 2030 (%)	Expenditure (mil. US\$)
Energy	self-executing	-4.4	1,894.3
	international support required	-9.8	5,317.4
Agriculture	self-executing	5.8	885.43
	international support required	41.8	12,093.54
Waste	self-executing	-8.6	311.7
	international support required	-42.1	2,596.2
LULUCF*	self-executing	+50.05	131.98
	international support required	+145.7	1,127.98
Total self-executing expenditure			3,223.41
Total required international support expenditure (mil. US\$)			17,911.71
Total (mil. US\$)			21,135.12

As Viet Nam has become a lower middle-income country, ODA flows into Viet Nam have decreased markedly and have become less concessional with the country's graduation from IDA-terms in 2017. International Development Association (IDA) graduation in 2017. Also, ODA grants – which have been an important financial resource for technical assistance, capacity building and policy advice – have reduced sharply from around US\$ 400 million in 2012 to less than US\$ 50 million in 2015 (UNDP, 2018). In response, GoV has put in place new policies on ODA financing that reflect the new situation, and it is these new policies that will require IFAD to take a wholly different approach to ARD financing in Viet Nam – an approach that cannot replicate many of IFAD's most successful instruments and approaches of the past unless non-lending resources can be mobilized in time, quantity and quality to accompany IFAD and GoV financing, and finance those interventions for which GoV will not borrow (IFAD, 2018). Without going into detail here⁴⁴, GoV's new policies mandate that non-concessional ODA loan funds – which is how IFAD's lending is characterized – may be used to finance those capital investments defined as eligible by government. Thus, project designs will have to adhere to the categories open for loan financing while those who are not will need to be funded under grants. In this context, IFAD resources may no longer be utilized to provide grants to communities, households or as incentives for private sector engagement in inclusive value chain development. Nor can IFAD loan resources be used for institutional strengthening, capacity building, training, technical assistance, or technology transfer. These are considered "recurrent costs" under the new policies and must either be financed through public budgets or grant resources. In evaluating the desirability of a particular project or program that utilizes non-concessional loan resources, government will wish to ensure that the proposed interventions are high priority (e.g., aligned with national priorities); have potential for widespread impact; are

⁴⁴ See COSOP main text for details.

efficient; would generate income for paying the debt in the future; and would mobilize private sector and local financing.

Impact Identification, Evaluation, and Lessons Learned from IFAD and Donor Programmes

This section identifies a number of key lessons learned related to climate resilience and adaptation from past and ongoing IFAD programmes, previous COSOP implementation, and donor and development partner experiences. The IFAD lessons were derived from the 2013 Country Programme Evaluation (CPE) conducted by the IFAD Independent Office of Evaluation, a review of IFAD Indonesia project documentation (Mid-Term Reviews, Supervision Reports, etc.) and stakeholder consultations. It is hoped that the identification of these priority ENRM, social, and CC issues will help to deepen policy dialogue with the GOI, as well as identify links with other sector policies and strategies.

IFAD

The IFAD Viet Nam Country Strategic Opportunities Programme (COSOP) 2012-2017 and its extension by 2020 focused on three strategic objectives: SO1 - Enable poor rural provinces to carry out market-led pro-poor rural development; SO2 - Improve access of the rural poor – particularly women – to commodity and labour markets; and SO3 - Enhance the capacity of poor rural households to adapt to climate change. In order to achieve these SOs, four loan projects were approved for implementation:

- Sustainable Rural Development for the Poor (Ha Tinh and Quang Binh Provinces)
- Adaptation to Climate Change in the Mekong Delta (Ben Tre and Tra Vinh Provinces)
- Commodity-oriented Poverty Reduction Programme (Ha Giang Province)
- Commercial Smallholder Support (Cao Bang and Bac Kan Provinces).

In addition, three other projects that were designed under the prior COSOP completed implementation and closed during the period⁴⁵. Non-lending support activities included value chain development (regional grants to SNV and Helvetas), efficient inclusion of the country programme into NTP-NRD (MARD) and enhancing institutional capacities for project implementation and knowledge management (MPI).

In terms of general contexts, the most important changes for the new COSOP approach will be in the policy and fiscal contexts for rural development and international assistance. Viet Nam's graduation from IFAD blend to ordinary lending terms in 2018 and the revised fiscal policy of the GoV means that most of the instruments used under the prior COSOP – for example, competitive (matching) grants for co-investments for common interest groups (CIGs) and Public Private Partnerships (PPP) with private sector enterprises; capacity building, training and technical assistance; and research and development – would not be eligible under the current Government regulations. Therefore, many of the past experiences and lessons learned are not readily transferred into new IFAD programs supported by loan funds. The same is also true for the other donor supported programs, which face the same seismic shift in terms of having to move away from prior modalities

⁴⁵ Pro-poor Partnerships for Agroforestry Development (Bac Kan Province), Economic Empowerment of Ethnic Minorities in Poor Communes (Dak Nong Province), and Tam Nong Support (Tuyen Quang, Ninh Thuan and Gia Lai Provinces).

and instruments of support that are no longer possible under GoV's new fiscal policies.

Having said that, however, in moving forward and finding new and innovative ways to support improved social, environmental and climate change adaptation and resilience outcomes, there are still important experiences and lessons-learned to be considered whilst seeking new and innovative approaches that foster sustainable and inclusive development amongst Viet Nam's rural populations, especially disadvantaged groups such as the poor and ethnic minorities. The lessons presented here represent learning from the 2012-2017 period and are derived from (i) the COSOP 2012-2017 Completion Review (IFAD, 2017), (ii) the report *Agriculture and rural development and opportunities for IFAD in Viet Nam – input report for IFAD COSOP 2019-2025* (IFAD, 2018a), (iii) the report *External Review of IFAD-Funded Program in Viet Nam* (IFAD, 2018b), (iv) the report *Poverty, Gender, Ethnic Minority, And Youth Employment: A Background Document for IFAD COSOP 2019-2025* (Nguyen Ngoc Quang, 2018), and review of IFAD Viet Nam project documentation (Mid-Term Reviews, Supervision Reports, etc.) and stakeholder consultations.

Participation in agricultural value chains can be profitable for both enterprises and farming households, generating a poverty reduction impact.

By 2017 a total of 109 enterprises had invested in IFAD-supported agricultural value chains; which more than doubled the number as compared to 2015. The enterprises themselves invested some USD 12 million of their own resources. This benefitted some 30,578 farm households, of which more than half were poor or near poor and created 4755 new jobs. Overall, poverty was reduced by over 38% in project supported communes in the 2012-2015 period, which exceeded the target of a 20% reduction in income poverty.

Careful selection of pro-poor value chains is necessary to optimize poverty reduction impacts. While household incomes increased on average by over 25% across almost all the targeted commodities, some commodities did not perform as well. These included cassava and sugarcane in Gia Lai, *Acacia mangium* in Ha Giang, and cattle in Quang Binh. Income impacts were below 20% for these. Factors affecting the profitability of these latter commodities included low market prices, market price fluctuations, weather risk (prolonged drought and unusual rains in Ninh Thuan and Gia Lai), and disease.

Value chain development is not feasible in all areas targeted by poverty criteria. Investors logically prioritize their value chain investments where market potential is higher, the volumes of the available commodities can provide market leverage, and commodity production costs are competitive. As poverty targeting criteria largely leads to operating in more remote and disadvantaged areas, these conditions do not pertain and investors (e.g., lead firms) are largely unwilling or uninterested in taking on such high risk/low return areas. As a result, a "value-chain" approach in such areas tends to be more focused on an (supply-side) attempt to increase production of some few commodities for sale into local markets, with the risks inherent in doing so that local markets cannot absorb the production and that a too narrow focus on one commodity may overlook issues of sustainability in the types of small-scale, diversified production systems that are common to many poor, upland, subsistence/near-subsistence producer households.

Farmer demand for climate resilient farming packages, particularly among poorer households, is palpable. Over 770 pro-poor, climate resilient farming packages were adopted by more than 13,000 households, of which over two-thirds were poor or near-poor households.

Institutional and community demand exists for integration of climate change concerns into local development planning. With direct IFAD support, approaches and methodologies were developed and piloted in 180 communes. Subsequently, an additional 673 “non-project” communes in 5 provinces⁴⁶ adopted the “climate-informed” MOP-SEDP; a scaling-up carried out by the Provinces’ themselves as part of their strategic response to climate change. In addition, the climate-informed MOP-SEDP process was developed and piloted at district level in 27 of the 36 IFAD-supported project districts in the 5 provinces.

Bottom-up, participatory planning for small-scale rural infrastructure demonstrates strong pro-poor bias and community preference for climate resilient investments. The Community Development Funds (CDF) allocated to IFAD project communes and whose utilization were prioritized through community participatory planning tended to favour investments of a nature that promoted both inclusive local development as well as enhancing climate resilience. Examples include, lifesaving roads (i.e., disaster-secure access), secondary or tertiary irrigation or drainage structures for salinity control, erosion protection and soil management, sanitation and waste management, renewable energy and fresh water supply.

Common Interest Groups (CIG) and Cooperative Groups (CG) are central to the strategy to increase efficiency of agricultural production and household income of smallholders. An assessment undertaken of 1,894 CIG/CG supported through two IFAD projects showed that 76% of these were performing at a “satisfactory” or “moderately satisfactory” level immediately post-project. The level of sustainability and performance is found to be a function of the capacity of the group leaders and the support directed to them, amongst others. Selection of business-minded group leaders requires quality support from local agencies and BDS providers; finding such leaders in remote, rural and ethnic minority areas is challenging.

Supporting climate change adapted/climate smart agriculture dissemination and adoption requires more than a “package”. Although initial success may be made in terms of productivity and profitability, several CCA/CSA models have proven not to perform as well as expected under farmer conditions and/or when confronted with extreme weather conditions (e.g., drought, rainfall and seasonal variability, floods). Thus, to achieve CCA/CSA objectives, technology transfer must be done within a system that includes: (i) linked, systematic research backstopping on climate change and disaster risks with the capacity to account for local/regional biophysical and micro-climatic variability, (ii) access to timely, practical and locally relevant disaster risk and climate change adaptation information in order to guide and orient local planning and public and private (e.g., value chain) investments; and (iii) inter-institutional coordination/cooperation mechanisms so that agencies, institutions, private actors and provinces can interact more effectively for the identification and selection of viable CCA/CSA production models.

Policy dialogue, knowledge management, communication and partnership building are critical elements for institutionalization and up-scaling. Through deployment of non-lending support, in concert with loan resources, several key instruments and approaches have been successfully mainstreamed. Specifically, based on successful experiences with IFAD and other donors’: (i) pro-poor value chain development is a major focus in the 2016-2020 NTP-NRD⁴⁷ and articulated in

⁴⁶ These include: Ha Tinh, Quang Binh, Ha Giang, Ben Tre and Tra Vinh provinces.

⁴⁷ Prime Minister, Decision No 1600 on 16 August 2016 approving National Target Programme on New Rural Development Programme, 2016-2016.

its implementation guideline⁴⁸; (ii) in 2017 MPI revised its Decree on organization and operation of cooperative groups to legalize existing CIGs⁴⁹; (iii) the institutionalization of MOP-SEDP at commune level, and its participatory and bottom-up practice has been reinforced in a 2017 Circular from MPI on “*Guideline on commune investment planning for implementation of the NTPs*”⁵⁰; (iv) the Farmers Union – a nationwide mass organization – has adopted the F2F extension approach for use throughout the country; (v) IFAD’s and the Women’s Union active engagement with the State Bank of Viet Nam (SBV) and other partners resulted in the development of Decision 20 on microfinance, which was issued by the Prime Minister in 2017⁵¹; and (vi) IFAD’s Country Office provided inputs to MARD’s Action Plan⁵² for the implementation of GoV’s Decree 120 on sustainable and climate resilient development in the Mekong Delta.

Diversification of agricultural extension services through farmer-to-farmer (F2F) and enterprise-to-farmer (E2F) systems is more practical, effective and useful for the client-farmers, while providing for a result-based approach that increases accountability of both the service providers and the end-users.

Women’s savings-and-credit groups (SCGs) have proven to be effective tools for climate-smart diversification by smallholders, especially investments in more resilient short-term crops and livestock projects with faster turnover and higher income generating capacity. This requires accompanying access to quality technical assistance, especially to inform investment decision-making.

The promotion of SCGs remains a valid intervention as they serve as a useful entry point for low-income people to financial services, effectively reach smallholder households, and act as a strong tool for empowerment of women and poor households. SCGs have consistently shown their capacity to increase the incomes and asset base of poor households.

Other donors

Agriculture employs close to half the labor force, but the sector needs to be modernized. Labor productivity is declining, and land productivity is low compared with that in neighboring countries. Further, the impacts of over-intensive input- and natural resource-use are observed and felt. Most land is allocated to rice production and most jobs are still in primary agriculture. Agribusiness and the food industry are slow in supplying better paid jobs. Although the role of agriculture, livestock, and fisheries is declining, they will remain important to boosting shared prosperity and reducing poverty for years to come. Higher agriculture growth will require focusing on new drivers of growth, including agricultural innovation; inclusive value chain development, quality, and value addition; higher land market efficiency; greater sustainability of farm production and climate change resilience; and more efficient water use. (World Bank, 2017)

Strengthen natural resource management and improve water security. Better information technology and systems are needed for monitoring land and natural resources and improve their governance, to ensure their more efficient and sustainable use. Tools and support to build capacity of relevant stakeholders are

⁴⁸ MARD, Circular 05/2017-TT-BNNPTNT on 1 March 2017 instructing some contents for implementation of the National Target Programme, 2016-2020.

⁴⁹ Common Interest Groups have been the principle farmer-level organizational form promoted by IFAD-financed projects.

⁵⁰ Ministry of Planning and Investment, Circular 01/TT-BKHDT on Guideline on Commune Investment Planning for Implementation of National Target Programmes, 14 February 2017.

⁵¹ Decision 20/2017-QD-TTg of 12/6/2017 on regulations on activities of microfinance programs and projects of political organizations, socio-political organizations and non-governmental organizations.

⁵² Decision 816/QD-BNN-KH of 7 March 2018 by MARD on Action Plan for Implementation of the Decree 120.

needed to improve management of environmental and social risks. Support is required to government for developing and implementing integrated approaches to water resources management, to improve water security and productivity, and ensure sustainability of the sector. Relevant to agriculture, this includes attention to irrigation, climate-smart agriculture, and institutional governance in the water sector, especially to clarify roles and responsibilities, and promote integrated management of water resources. Private sector participation, both as a provider of water services and as an investor, should be sought. Where appropriate, spatial approaches to engagement should be adopted. (World Bank, 2017)

Increase climate resilience and strengthen disaster risk management.

Support is needed for regional planning, decision-making and climate-resilient livelihoods and infrastructure. Specific and spatially targeted support for climate-smart practices in key commodity producing districts and regions (e.g., in coastal communities for fisheries) are needed. Upstream strategic support for policy reforms relating to climate resilience (e.g. water and forests) are also key. Engagement in disaster risk management (DRM) should seek to strengthen resilience to the impacts of natural hazards, climate change, and pandemics, with emphasis on building capacity of government and communities and focusing on ex-ante risk reduction. For the latter, the following thematic areas require support: (i) strengthen institutional DRM policy and planning capacity; (ii) strengthen core DRM technical capacity and investments; (iii) support development of hydro-meteorological services and an early warning system; (iv) mainstream DRM in key sectors; (v) increase household level resilience to disasters; (vi) support stronger DRM financial protection and post-disaster resilience; and (vii) ensure pandemic preparedness. (World Bank, 2017)

Achieving NDC goals in the ARD and natural resources sectors. Priorities currently include: (i) ensuring food security and generating livelihoods opportunities; (ii) streamlining and duplicating models of integrated farming, climate smart agriculture, and agroforestry; (iii) restoring and increasing forest and mangrove covers; (iv) transforming the economic models of the Northern delta and the Mekong River delta in response to climate change; and (v) creating flood risk maps and improving early warning systems; (vi) modernising the meteorological, forecasting, and monitoring systems for weather and extreme events; (vii) developing a system for assessing and monitoring climate change and sea level rise; (viii) protecting water resources and ensuring water security; and (ix) promoting community-based adaptation. As women account for 63% of the agricultural labour force, their role in informing and leading action plan implementation will be key. (UNDP, 2018)

Recommendations to Enhance Environmental and Climate Change Resilience in the Agriculture and Rural Development Sector

This section sets out to identify the principal social, environmental and climate change issues where IFAD has a comparative advantage for engaging in both policy dialogue with GoV and as interventions to be included in the COSOP for IFAD loan and/or IFAD-mobilized non-loan resources (e.g., from Green Climate Fund and/or the Global Environmental Facility).

Strategic Orientation of the Proposed COSOP

The overarching goal of the COSOP is “sustainably improved incomes of smallholders and rural poor through market participation and reduced climate vulnerability”. The strategic objectives are:

- SO-1: Build pro-poor and stable value chains leveraging significant investments from the private sector.
- SO-2: Enhance and expand financial inclusion for climate resilient rural livelihoods;
- SO-3: Foster the environmental sustainability & climate resilience of ethnic minorities' smallholder economic activities.

The COSOP is targeted to smallholders and agri-SMEs in underserved areas with a concentration of ethnic minorities. At the institutional level, the new programme targets Micro-Finance Institutions with reference to Women Development Funds. In order to keep the pace with the transformation of the national economy and of its rural sector, the targeting strategy innovates significantly in terms of approach and modalities while maintaining the focus on inclusiveness, facilitating the participation of the youth and women. This proposed targeting strategy will fit with the programmatic approach that will be adopted by this COSOP, in contrast with the project by project approach that characterized the previous one. The range of provinces eligible for IFAD support will be expanded, while in each participating province the support itself will become more focused.

The COSOP will support the Government's agenda of smart agriculture through climate-smart, inclusive value chain development. The primary investments will be in value chain development. The focus here would be on (i) scaling up farmer organizations to meet or exceed the minimum cultivated area requirements for achieving production volumes that give market access and leverage; (ii) technical assistance and extension; (iii) climate-smart agricultural inputs; (iv) capital investment in key value chain infrastructure & technology (e.g., post-harvest, primary processing, cold storage, market access; water conserving irrigation; other productive infrastructure); and (v) subject to an effective mobilisation of complementary grants, high-level technical assistance necessary for ensuring management of weather and climate risk at the levels of the smallholder production systems.

A large share of the loan financing is expected to go for infrastructure that is targeted to support the selected value chains (to be identified in detailed project preparation, with the provinces) and that furthers climate change adaptation and resilience objectives. The forecast for IFAD financing amounts to about US\$ 42 million for 2019-2021 and US\$ 84 million for 2022-2025 for a total of about US \$ 126 million.

The principal challenges lie in that fact that, in order to achieve COSOP objectives, significant technical assistance, capacity building, research & development, and other investments will be essential, and these are things for which Government would neither be able to borrow nor use its own resources. Thus, IFAD will have to successfully mobilize significant non-loan resources (GCF/GEF grants, donor partners, in-kind technical services, ASAP funds (climate), IFAD regional and country grants) as well as support from IFAD's South-South Technical Cooperation Programme. The implementation of an effective country knowledge management/policy dialogue strategy, as well as the establishment of a framework to deliver capacity building services long term for farmers and SMEs will also be dependent on mobilization of grant resources from regional and country-level grant projects and programs.

IFAD's South-South Technical Cooperation Programme's role will also be key, especially with reference to private sector engagement in pro-poor value chains, the

sharing an uptake of climate change adaptation solutions, and policy-related exchanges for these.

Proposed SECAP Strategic Actions

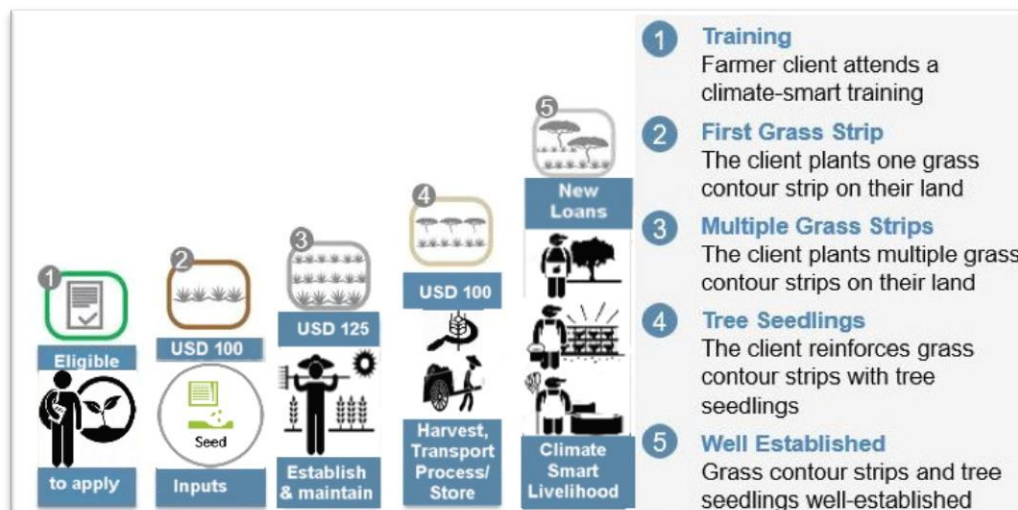
The key strategic interventions *viz.* natural resources management and climate change adaptation within the IFAD program areas should include:

Rural financial services. Integrate climate change adaptation concerns into rural finance through working with all actors in the proposed micro-finance institutions (MFI) financing chain to incorporate climate risk into their loan portfolios and incentivize the adoption of climate-smart farming practices by smallholders. This would largely focus on introducing “climate-smart credit” approaches into on-lending:

- At the level of the refinancing facility, assess the MFI’s applications for loans against agreed investment guidelines that will include assessment criteria (to be developed, tested, validated, and institutionalized) of the requesting MFIs’ internal policies and guidelines for management of credit default risk due to weather and natural disaster risks.
- At the level of the MFI, assess the local groups (e.g., Women’s Saving’s and Credit Groups) that receive funding from the MFI for their group lending operations against agreed investment guidelines that include assessment criteria (to be developed, tested, validated, and institutionalized) of the requesting local groups’ guidelines for lending to group members (and others, where relevant) in order to manage credit default risk due to weather and natural disaster risks.
- At the local group-level, assess the loan requests from group member against basic criteria of avoidance of credit default risk due to weather and natural disaster risks, allowing smallholder farmer clients to borrow on the condition that they adopt climate smart farming practices. At this level, simplified, production system-specific guidelines on appropriate practices should be developed, tested, validated, and institutionalized for the principal crops and/or livestock production systems within the agroecological zones in which the MFIs operate. See Figure 16.
- At the smallholder group level, provide training, knowledge, technical support on climate smart agricultural practices.

The breadth, depth and intensity of this approach would be dependent upon ability to obtain grant financing for technical assistance, studies, knowledge management processes, technical quality control, institutional capacity building, training, and extension to complement and expand upon what would be a much more modest approach and process if reliant upon public budget. A GCF concept note is being developed as a part of the COSOP to provide programmatic support across the portfolio for development and institutionalization of climate smart lending.

Figure 16 An idealized “climate-smart credit product”



Source: adapted from *F3 Life*, 2018

Climate adapted agricultural and rural value chains. It is proposed that this would comprise three focal areas: (i) value chain development for commodities of regional or provincial strategic importance; (ii) facilitation of smallholder inclusion in established value chains; and (iii) smallholder economic empowerment and resilience for smallholders that are not immediately able to join in one of the major value chains, especially ethnic minorities, farming households, landless, and other marginalized groups whose remoteness from major commodity markets, lack of productive assets and/or creditworthy activities are barriers to entry/participation in interventions under the other two focal areas.

In all cases, it is of high strategic importance that climate change adaptation, and its expressions as weather risk and natural disasters, be mainstreamed into the design and finance of the interventions under these three focal areas. In addition, because of the real and immediate concerns on over-use and abuse of agrochemicals, especially in the cultivation of major commercial commodities, the value chain programs will need to take advantage of existing, market-incentives for appropriate usage of agricultural inputs by farmers. Specifically, these would include promotion of (in the case of value chain development) or mandating (in the case of smallholder inclusion in existing value chains⁵³) compliance with VietGap⁵⁴, GlobalGap⁵⁵, and/or other voluntary standards in crop production/livestock/aquaculture, accompanied with training and extension assistance to meet these standards. In the case of smallholder economic empowerment and resilience for smallholders, these by nature would tend to be low input systems where risks of over-use and abuse of agrochemical inputs only becomes problematic to the extent that the activity becomes sufficiently profitable as to both allow and incentivize such behavior.

⁵³ The existing value chains are primarily those operated by large companies to supply their food retail (e.g., supermarkets) operations and these require that farmers meet certain food safety standards, which oftentimes will be VietGap standards, or in export markets, GlobalGap standards.

⁵⁴ VietGAP (Viet Nameese Good Agricultural Practices) are good agricultural practices for agricultural and aquatic products. It specifies the principles, norms and procedures that guide production, harvest and post-harvest to ensure food safety and quality, social welfare and health of both producers and consumers, environmental protection, and traceability. VietGAP standards are based upon GAP standards, including AseanGAP, GlobalGAP, EurepGAP, and HACCP, as well as Viet Nameese legislation on hygiene food safety.

⁵⁵ GlobalGAP is a global organization whose objective is safe, sustainable agriculture worldwide. GlobalGAP sets voluntary standards for the certification of agricultural products around the globe. More and more producers, suppliers and buyers are harmonizing their certification standards to match those of GlobalGAP in order to more readily integrate into international markets.

However, in the first instance, the approach should be to promote natural, sustainable farming practices, i.e., use of locally available or produced organic inputs⁵⁶, improved cultural practices⁵⁷, and IPM practices where such exist and are proven effective (e.g., for rice stemborer and brown rice hopper) at the outset and take advantage of local opportunities where organic produce may have a differentiated market (e.g., where tourism has generated a local hospitality sector).

The approach for doing so would vary, depending upon focal area and the institutions involved, the markets for the value chain products, and the available sources of financing. As mentioned above for the rural financial services, here as well the breadth, depth and intensity of the natural resources and climate change adaptation-oriented interventions would be dependent upon ability to obtain grant financing and/or leverage partnerships with other organizations (e.g., FAO, GIZ, JICA) for technical assistance, studies, knowledge management processes, technical quality control, institutional capacity building, training, and extension. In the absence of these, the approach would have to be capitalized upon the existing capacities within the participating private sector partners⁵⁸ and government's R&D and technical services/extension, with some modest hypothesis of the extent to which that could be improved and strengthened over the lifetime of the program to provide for enhanced outcomes. The programmatic support that will be sought through the GCF would notionally extend to supporting these three focal areas as well.

Some specifics for the value chain development for commodities of regional or provincial strategic importance and for facilitation of smallholder inclusion would include: (i) technical assistance, training and extension, including for lead Value Chain firms to develop and implement inclusive business plans that integrate climate change adaptation and disaster risk management into the planning and finance; (ii) adapting crop production and management systems to climate smart systems and to meet food safety and market quality standards, including any specialized tools, machinery, equipment, agricultural inputs, etc.; (iii) capital investment in key value chain infrastructure to enhance sustainability (e.g., water conserving irrigation); and (iv) high-level technical assistance necessary for ensuring management of weather and climate risk throughout the value chain, food safety/traceability and compliance with quality standards; and (v) policy engagement and dialogue to support GoV in addressing constraints and upscaling successful, climate resilient models and approaches.

As regards smallholder economic empowerment and resilience for smallholders, for the most part, this would require simpler technologies and skills on the part of the participants, and can be profitable without requiring significant, external inputs. They also can be more readily supported by district extension officers, with proper guidance by the IFAD program. There will be a wide range of such activities, they will be context and opportunity specific. Examples of such include: (i) certified, organic products, such as NTPS; (ii) rice-shrimp farming; (iii) off-farm, income generating activities (e.g. handicrafts, broom-making); iv) intensive goat raising, combined with homestead gardens speciality products such as ginger; (v) ecotourism and homestays. Also, the target group associated with this would have access to government's basic offer of extension, as well as to IFAD-supported microfinance

⁵⁶ For example, crop residue management, green manure crops, farmyard manures, recycling of wastes between production systems (e.g., shrimp/rice), compost, biochar, *bokashi*.

⁵⁷ For example, halting of burning for land clearance and/or of crop residues, minimum tillage, soil and moisture conservation practices.

⁵⁸ Which itself would vary, for example between working with a major company that owned a countrywide chain of supermarkets and that maintains a technical staff to work with their contract farmers and working with an SME that may have little or no technical capacity or knowledge.

services (i.e., climate-smart lending approach). Also, government's NTP-NRD and NTP-SPR (including P135 resources) could be leveraged, harmonized and integrated to allow for meeting GoV's and IFAD's joint concerns regarding climate change adaptation and environmental sustainability. Also, additional support may also be organized through the SSTC channel.

Infrastructure. The strategic focus here must be on development of climate resilient infrastructure, which would need to depart from an identification and systematization of the tested and proven, existing approaches (e.g., as developed under the ADB-financed *Viet Nam: Promoting Climate Resilient Rural Infrastructure in the Northern Mountain Provinces*) and, with GoV resources, the development of technical manuals (design, implementation) and guidelines. This must also include spatial planning to avoid, to the extent possible, the construction of infrastructure in areas prone to natural disaster risks (especially, flash flooding and landslides). Should additional non-lending resources be obtainable, complementary investments to enhance knowledge and capacity for design, construction and O&M for climate resilient infrastructure would be sought (e.g., for identification, testing and piloting of new technologies and/or systems; and provision of specialized technical assistance for design, implementation and supervision of CCA infrastructure construction).

Opportunities for climate change mitigation. As noted previously, the agricultural sector is a major contributor to GHG emissions. While within the COSOP the focus is on adaptation for smallholders and the value chains in which they participate, there will be opportunities as well for mitigation. Those would come primarily through: (i) rice systems – extension of SRI rice and assistance to farmers to move out of rice production into more profitable, value chain opportunities; with the latter possibly providing the greatest opportunity for impacts; and (ii) agricultural soils and manure management (which go hand-in-hand) for improved fertility management (i.e., increasing organic inputs), reduced tillage, soil and moisture conservation, and biogas. Should grant and/or partnership resources become available, it could be useful to attempt to quantify the impacts of these types of practices, not so much as to “generate carbon credits” within the scope of the program, but to contribute to a broader, countrywide understanding of the values and potentials for smallholder mitigation.

Payment for Forest Environmental Services. From a practical standpoint, it would be outside the scope of an IFAD program to develop payment of environmental services (PES) schemes in function of achieving broader climate change and sustainable natural resources management objectives. This, with one exception. The successful establishment of a platform for climate smart lending, would itself constitute a form of PES, in that farmers could be rewarded (through access to credit) for their contributions towards enhancing the resilience of the agricultural sector and food security.

The more practical option would be to take advantage of existing (and emerging) PES schemes to benefit IFAD's target groups. Unfortunately, even though Viet Nam was the first country in Asia to pass a PES law (2010) 2010⁵⁹, implementation progress has been slow and covers less than half (26) of Viet Nam's provinces. The problems arise from a number of issues: ambiguous legal status of communities as they are not recognized as legal entities; land users have forest land

⁵⁹ The law establishes that the service buyers are water and electric utilities, tourism industry, as well as a few others; and the service providers are farmers and households with allocated 'forest land'. The mechanism is through payments to a centralized fund for National PES policy, and as such primarily constitutes a means to generate extra revenue for the state for forest protection.

transfer/lease/mortgage rights in theory, but not in practice; central government can override existing livelihoods and provide directives that only certain trees are planted in certain areas⁶⁰; difficulty in identifying the forest rights holder to effect payment; all disbursements of PES funds are controlled by the state, which decides on their allocation in the absence of any structures for negotiations among stakeholders, whose participation is not required in the decision-making and allocation process; excessively bureaucratic processes that are barriers to smaller, poorer households benefitting; and a lack of clarity as to whether payments are actually reaching farmers and, if so, in how timely a manner. At present GoV's PES programs operate as if they were just another government subsidy program whose long-term financial sustainability is unclear. Equally unclear is if the payments are generating positive impacts in terms of environmental protection and improving livelihoods. (Clement and Suhardiman, 2017).

In conclusion, the existing PES opportunities, other than the development of a climate smart credit platform, do not appear to be practical or relevant as yet to IFAD's target groups. GoV's PES program is centrally driven, dominated by a strong state role in forest management that overrides any idea of a market-oriented approach and largely lacks enabling conditions to tackle key underlying causes for deforestation (e.g., uneven land tenure, lack of participation by local communities in conservation, weak and ambiguous land/forest rights, no structures for negotiation, and all disbursements decided by state).

COSOP target groups – strategic orientations. The target groups include (i) ethnic minority households, subsistence farmers in upland areas, and the landless poor; (ii) smallholder farmers and households; (iii) women; and (iv) rural youth. For each of these, certain orientations should be considered when designing SECAP interventions. Amongst the most important are:

- *Ethnic minority households, subsistence farmers in upland areas, and landless poor* – (i) systematic engagement (under FPIC principles) with targeted ethnic minority groups in high poverty areas to identify opportunities, options and priorities for generating sustainable, climate-resilient livelihoods and to jointly develop approaches strategies to mobilize their communities; (ii) organize producer groups and provide them with culturally appropriate training and capacity building; (iii) technical assistance to ensure that weather and climate risk are properly mitigated or avoided in the set of investment activities supported; (iv) capitalize on niche opportunities (e.g., “One Commune, One Product”) for improving local livelihoods; (v) approaches that incentive and support self-help for asset accumulation, acquisition of new skills and technologies, etc. will be required given the new realities of rural development policy and programs; and (vi) principal pathways for reducing vulnerability will include improving access to microfinance and climate resilient livelihoods.
- *Smallholder farmers/households* – (i) provincial, district and commune NTP-NRD resources will need to be mobilized and aligned to support development of value chains: (ii) farmer organizations will need to be of a scale to provide leverage throughout the production chain (input supply, TA/extension, post-harvest, transport, value-added processing, marketing, etc.); (iii) technical

⁶⁰ Especially *Acacia mangium*, an exotic, fast-growing species that has already been planted in monocultural plantations across more than 1.1 million ha (Nambiar *et al.*, 2015) and which is primarily destined for the (low value) chip market.

- assistance, training and extension for smallholders and their associated lead value chain firms will be critical to develop and implement inclusive business plans and to access financing through commercial banks; (iv) focus in crop production and management systems should be on adopting climate smart systems and meeting food safety and market quality standards; (v) capital investment will be required in key value chain infrastructure (e.g., post-harvest, primary processing, cold storage, market access, water conserving irrigation, warehouses, workshops, processing and packaging facilities, other productive infrastructure); (vi) high-level technical assistance will be essential to ensuring management of weather and climate risk throughout the value chain, food safety/traceability and compliance with quality standards; and (vii) policy engagement and dialogue to support GoV in addressing constraints and upscaling successful models and approaches.
- *Women* – (i) access to enhanced learning opportunities to gain and assume new leadership and entrepreneurial roles in communities; (ii) for ethnic minority women, opportunities for productive and stable on-farm and off-farm employment; (iii) measures to ensure women’s participation in relevant activities, including minimum participation rates in Village Development Boards (VDBs) and collaborative groups (CGs) and for vocational training and credit access; (iv) women’s entrepreneurship programs to strengthen their specific roles within the value chains; (v) physical investments that improve women’s access to basic rural infrastructure and services, such as water, energy, roads and transport; (vi) attention to maintaining a gender balance in management and community-based decision-making; (vii) appropriate information & communication strategies that consider that many ethnic people are not fluent in the Kinh language, and the incidence of female illiteracy is high; (viii) livelihood options can be expanded by targeting women in literacy, numeracy, financial management and market orientation training and job/skills training and extension; (ix) promote women’s savings and credit and marketing groups; (x) Sensitize government staff to issues and problems relating specifically to women, especially ethnic minority women; (xi) increase awareness of women, particularly in ethnic minority groups, on needs for and how to improve nutrition and child care; and (xii) gender-disaggregated monitoring data.
 - *Rural Youth* – (i) promote awareness & participation in GoV’s “*Vocational training for rural workers to 2020*”, and target poor households, ethnic minorities, disabled people and landless; (ii) high-level technical assistance will be needed to assess provincial DARD’s agricultural extension centres’ capacity & needs to fulfil role of improving production & business efficiency of producers, provide rural workers with knowledge of/skills for agricultural services & businesses, & enhancing the quality, food safety and hygiene of products; (iii) disseminate IFAD’s experience & lessons learned from working in difficult areas with vocational training programmes; (iv) promote agricultural sector SMEs as employment alternatives and as providers of on-the-job-training & apprenticeship programmes to upgrade skills amongst disadvantaged youth; and (v) improve rural labor market information systems to better identify occupational trends, and assess impacts of programmes on employment outcomes, particularly several years after graduation.

VCs and environmental/climate change considerations – strategic orientations.

Two overarching concerns are the unsustainable exploitation of land, soil and water resources for agricultural production and that agricultural sector and rural poverty alleviation efforts and gains are being jeopardised by extreme weather events, which in turn are being exacerbated by climate change. Thus, the design of SECAP intervention, should consider:

- *Unsustainable exploitation* – (i) promotion of compliance with VietGAP, GlobalGAP, and/or other voluntary standards in crop production/livestock/aquaculture, accompanied with training and extension assistance to meet these standards; (ii) support the inclusion of smallholders in established value chains of large, national wholesale/retail/export companies whose farmer’ contracts mandate compliance with GAP standards, and that provide TA & extension services to their contract farmers to meet these standards; (iii) promote natural, sustainable farming practices, such as, use of locally available or produced organic inputs⁶¹, improved cultural practices⁶², and IPM practices⁶³ where such exist and are proven effective; (iv) take advantage of local opportunities where organic produce may have a differentiated market (e.g., where tourism has generated a local hospitality sector); and (v) obtain non-loan resources to provide high level technical assistance to assist in capacity building & technical support to provincial technical service providers (government, non-government, private) on GAP and food safety practices, and sustainable farming systems for supported commodities; systematization and dissemination of GAP and food safety practices for supported commodities; and research and development to strengthen GAP practices and sustainable farming systems for supported commodities.
- *Weather risk* – (i) reduce climate vulnerability of smallholders and rural poor through market-led, climate adapted agricultural and rural value chains; (ii) mainstream climate change adaptation and natural disaster avoidance/mitigation in design and finance of value chain, livelihood & infrastructure investments; (iii) introduce “climate-smart credit” approaches into on-lending: integrate climate change adaptation into rural finance & incorporate climate risk into loan portfolios, incentivize adoption of climate-smart farming practices by smallholders; (iv) promote climate smart agricultural systems in targeted commodities; (v) make capital investment in key value chain infrastructure to enhance sustainability (e.g., water conserving irrigation); and (vi) obtain non-loan resources to provide high level technical assistance for systematization and dissemination of climate smart agricultural practices for supported commodities; development of climate scoring and climate-smart credit systems for on-lending; studies, knowledge management processes, technical quality control, institutional capacity building, training, and extension to complement and expand upon public budget for technical assistance and extension (NTP-NRD, NTD-SPR); management of weather and climate risk throughout the value chain, food

⁶¹ For example, crop residue management, green manure crops, farmyard manures, recycling of wastes between production systems (e.g., shrimp/rice), compost, biochar, *bokashi*.

⁶² For example, halting of burning for land clearance and/or of crop residues, minimum tillage, soil and moisture conservation practices.

⁶³ For example, for rice stemborer and brown rice hopper.

safety/traceability and compliance with quality standards; and policy engagement and dialogue to support GoV in addressing constraints and upscaling successful, climate resilient models and approaches.

Proposals for monitoring and feedback mechanism

The following table proposes a set of indicators for the expected outputs from the SECAP's recommended actions/measures, as well as for strategic objective 3 of the COSOP, which deals most directly with environmental and climate change issues.

Recommendation	Expected Output	Indicator
<p>SECAP study recommended strategic objective Sustainable, equitable income improvement and reduced climate vulnerability amongst smallholders and rural poor.</p>	<p>COSOP strategic objectives provide for smallholders' and rural poor' attainment of climate resilient, sustainable livelihoods within a sustainable agricultural production and triple bottom line paradigm.</p>	<p>Mainstreamed throughout COSOP</p>
<p>Priority strategic actions Smallholder and rural poor access technologies and production services for climate smart agriculture & food safety</p>	<p>COSOP provides for needed analytical work; systematization & dissemination of knowledge; and enhanced access to technical assistance, training, and services for developing climate resilient value chains, climate-smart agriculture, & meeting quality standards for accessing national & international markets.</p>	<p>Number of persons/ households adopting sustainable/climate-resilient technologies & practices Number of persons/ households meeting VietGap, GlobalGap, and/or other voluntary standards in crop production/ livestock/aquaculture</p>
<p>Priority strategic actions Increase participation of smallholder households in stable, pro-poor value chains</p>	<p>COSOP targets value chains w/ high smallholder inclusion & promotes innovative service mechanisms to support producers & lead enterprises/ agencies (SMEs) to develop stable, longer-term, equitable relationships between selves & wholesalers/ retailers</p>	<p>Number of new smallholder households participating in pro-poor VCs</p>
<p>Priority strategic actions New, poverty reducing, and sustainable livelihood options developed by poor communities</p>	<p>COSOP effectively supports & leverages GoV's primary policy/program for poverty alleviation amongst poor ethnic groups ("One Commune, One Commodity")</p>	<p>Number of new local, climate-adapted, short value chains.</p>

Recommendation	Expected Output	Indicator
<p>Priority strategic actions Effective policy dialogue engagement on overcoming agricultural credit impediments to development of climate resilient, pro-poor value chain development. Link to introduction of "<i>climate smart lending</i>" to incorporate climate risk into loan portfolios and incentivize the adoption of climate-smart farming practices by smallholders.</p>	<p>Via the COSOP, IFAD engages with relevant GoV agencies (MPI, MOF, SBV) for advancing inclusive financing services for rural poor.</p>	<p>Climate change adaptation concerns internalized into micro-finance institutions (MFI) for provision of "<i>climate-smart credit</i>"</p>
<p>Priority strategic actions IFAD COSOP leverages significant international funding for climate change and green growth</p>	<p>COSOP leverages significant additional support from supplemental sources, e.g., South-South and Triangular Cooperation, GEF, GCF, Agri-business Capital Fund (to be launched by IFAD in 2019).</p>	<p>Number of projects/activities receiving supplemental financing</p>

Tables on existing ENRM and CC stakeholders and initiatives

Table 1. Climate Funding (Source: Climate Funds Update, <https://climatefundsupdate.org/data-dashboard/regions/>)

Funding (USD millions)		Approved	Duration (years)	Fund	Implementing Agency	Name of Project	Recipient Institution	Theme / Objective
Total	Grant							
\$ 9.80	\$ 9.80	2007	Unspecified	Global Environment Facility (GEF4)	IBRD	Hanoi Urban Transport Development		Mitigation - general
\$ 4.38	\$ 4.38	2009	4	UNREDD Program	FAO / UNDP / UNEP	Direct support to design & implementation of UN-REDD National Programmes	MARD, MONRE, MPI, MoF, CEMMA	Mitigation - REDD
\$ 3.40	\$ 3.40	2009	Unspecified	Special Climate Change Fund (SCCF)	ADB/UNDP	Climate-resilient Infrastructure Planning & Coastal Zone Development		Adaptation
\$ 3.03	\$ 3.03	2009	Unspecified	Global Environment Facility (GEF4)	UNEP	Phasing out Incandescent Lamps through Lighting Market Transformation in Viet Nam		Mitigation - general
\$ 2.37	\$ 2.37	2009	Unspecified	Global Environment Facility (GEF4)	World Bank	Viet Nam Clean Production & Energy Efficiency Project		Mitigation - general
\$ 0.86	\$ 0.86	2009	Unspecified	Global Environment Facility (GEF4)	UNIDO	CF: Promoting Industrial Energy Efficiency through System Optimization & Energy Management Standards		Mitigation - general
\$ 8.60	\$ 3.60	2010	Unspecified	Clean Technology Fund (CTF)	IFC	Sustainable Energy Finance Program (V-SEF)	Private sector	Mitigation - general
\$ 0.35	\$ 0.35	2011	Unspecified	Partnership for Market Readiness		Market Readiness Proposal MRP		Mitigation - general
\$ 30.00	NA	2012	6	Clean Technology Fund (CTF)	IBRD	Viet Nam Distribution Efficiency Project	GoV	Mitigation - general
\$ 8.80	\$ 8.80	2012	Unspecified	Forest Carbon Partnership Facility (FCPF)	IBRD	Readiness preparation grant	MARD	Mitigation - REDD
\$ 2.80	\$ 2.80	2012	5	Global Environment Facility (GEF5)	UNDP	Promotion of Non-fired Brick (NFB) Production & Utilization	Ministry of Science & Technology (MOST)	Mitigation - general
\$ 49.97	\$ 1.02	2013	Unspecified	Clean Technology Fund (CTF)	ADB	Sustainable Urban Transport for Ho Chi Minh City Mass Rapid Transit (MRT) Line 2 Project		Mitigation - general

\$ 12.00	\$ 12.00	2013	5	Adaptation for Smallholder Agriculture Programme (ASAP)	IFAD	Project for Adaptation to Climate Change in Mekong Delta in Ben Tre & Tra Vinh Provinces		Adaptation
\$ 3.20	\$ 3.20	2013	Unspecified	Global Environment Facility (GEF5)	UNDP	Energy Efficiency Improvement in Commercial & High-Rise Residential Buildings	Ministry of Construction	Mitigation - general
\$ 1.77	\$ 1.77	2013	Unspecified	Global Environment Facility (GEF5)	UNIDO	Promotion of Energy Efficient Industrial Boiler Adoption & Operating Practices	Ministry of Industry & Trade (MOIT)	Mitigation - general
\$ 1.52	\$ 1.52	2013	Unspecified	Global Environment Facility (GEF5)	UNDP	Local Development & Promotion of LED Technologies for Advanced General Lighting	Viet Nam Academy of Science and Technology (VAST)	Mitigation - general
\$ 0.29	\$ 0.29	2013	Unspecified	Global Environment Facility (GEF5)	UNIDO	Reducing Greenhouse Gas & ODS Emissions Through Technology Transfer in Industrial Refrigeration	MONRE, MARD, Cleaner Production Centre	Mitigation - general
\$ 50.00	NA	2014	Unspecified	Clean Technology Fund (CTF)	ADB	Hanoi Sustainable Urban Transport Program - Project 2: Strengthening Sustainable Urban Transport for Hanoi Metro Line 3		Mitigation - general
\$ 49.96	\$ 1.01	2014	Unspecified	Clean Technology Fund (CTF)	ADB	Hanoi Sustainable Urban Transport Program - Project 1: Hanoi Metro System Line 3		Mitigation - general
\$ 4.57	\$ 4.57	2014	Unspecified	Special Climate Change Fund (SCCF)	ADB	Promoting Climate Resilience in Viet Nam Cities		Adaptation
\$ 3.00	\$ 3.00	2014	Unspecified	Partnership for Market Readiness		PMR Program Viet Nam		Mitigation - general
\$ 0.35	\$ 0.35	2014	Unspecified	Global Environment Facility (GEF5)	UNEP	Preparation of Viet Nam's Initial Biennial Update Report to UNFCCC	MonRE	Multiple foci
\$ 1.00	\$ 1.00	2015	Unspecified	Clean Technology Fund (CTF)	ADB	M&E TA: Mainstreaming Climate Change Mitigation into National Infrastructure	GoV	Mitigation - general
\$ 29.50	\$ 29.50	2016	5	Green Climate Fund (GCF)	UNDP	(FP013) Improving Resilience of Vulnerable Coastal Communities to Climate Change related Impacts in Viet Nam	MARD	Multiple foci

Table 2. Donors active in ENRM and Climate Change

Organization	Description of Portfolio
ADB	<p>The ADB Country Partnership Strategy (CPS) for 2016–2020 for Viet Nam supports investments and policy reforms that promote more inclusive and environmentally sustainable economic growth. The CPS is based on three areas of focus: (1) promoting job creation and competitiveness; (2) increasing the inclusiveness of infrastructure and service delivery, and (3) improving environmental sustainability and climate change response. Relevant existing projects:</p> <ul style="list-style-type: none"> • Northern Mountain Provinces Transport Connectivity Project. 2018-2024. US\$240.6 million. Climate-resilient transport infrastructure in north western Viet Nam completed • Water Efficiency Improvement in Drought-Affected Provinces Project. 2018-2024 US\$123.2 million. The project integrates climate-resilient agricultural practices through a transformational shift in irrigation modernization, including (i) strengthening irrigation management to improve climate resilience, (ii) modernizing irrigation infrastructure, and (iii) supporting efficient on-farm water management practices. It covers eight irrigation systems in five drought-affected provinces (Binh Thuan, Dak Lak, Dak Nong, Khanh Hoa, and Ninh Thuan). The modernized systems will enhance the provinces' ability to manage climate variability, improve the water productivity of agriculture, and increase incomes by supporting farmers in growing high-value crops (HVCs) such as coffee, peppers, grapes, apples, dragon fruits, and mangoes. The project is in response to the El Niño Southern Oscillation (ENSO)-induced drought of 2014-2016. See GCF co-financing "<i>Strengthening the resilience of smallholder agriculture to climate change-induced water insecurity in the Central Highlands and South-Central Coast regions of Viet Nam</i>"
Canada	<p>Canada's current development cooperation program in Viet Nam responds to the Government of Viet Nam's poverty reduction priorities and focuses on improving the enabling environment for investment and supporting rural enterprise development and agricultural competitiveness. Of relevance to the ENRM/CC agenda are: (i) increasing agricultural competitiveness by improving food safety and quality and by supporting agricultural innovation and the development of marketing techniques for farmers and traders, especially at the provincial level; and (ii) actively engaging in the Government of Viet Nam's donor consultative group coordination process and playing an active role in supporting recognition of and space for Viet Nameese and international civil society. Current relevant project is:</p> <ul style="list-style-type: none"> • Viet Nam Cooperative Enterprise Development. CAN\$12.9 million. 2015-2021. The project aims to reduce poverty and contribute to equitable economic growth by increasing the competitiveness and productivity of Viet Nameese agricultural cooperatives, including the provision of training to farmers on environmentally sustainable agricultural production techniques, such as the safe application of fertilizer and pesticides, and post-harvest handling in order to meet quality certification standards and access new markets.
FAO	<p>The FAO Country Programming Framework (CPF) for 2017-2021 aims at 4 priority areas: (i) Increased food security with focus on alleviation of hunger, malnutrition and food safety concerns; (ii) Sustainable</p>

Organization	Description of Portfolio
	<p>development of the agriculture sector (including crop production, livestock, fisheries and forestry), contributing to the national Green Growth and other strategies on improved natural resources management and environment protection; (iii) New Rural Development and Sustainable Poverty Reduction; and (iv) Enhancing resilience of communities to disasters and threats. Relevant projects include:</p> <ul style="list-style-type: none"> • Sustainable Agricultural Development: Supporting Developing Countries to Integrate the Agricultural Sectors into National Adaptation Plans (NAPs); Green Production and Trade to Increase Income and Employment Opportunities for the Rural Poor • Integrated Pest Management: Capacity building and policy reform for pesticide risk reduction in Viet Nam • Forestry: Strengthening Forest Tenure for Sustaining Livelihoods and Generating Income; UN-REDD Programme for Viet Nam; Community Based Forest Harvesting in Viet Nam for poverty reduction in Viet Nam • Fisheries: Pilot application of aquaculture planning and management tools for sustainable growth; small scale brackish water fish cage culture with the vulnerable households; • Food Security, Food Safety and Nutrition: Integrated nutrition and food security strategies for children and vulnerable groups in Viet Nam; Strengthen Viet Nameese SPS Capacities for Trade – Improving safety and quality of fresh vegetables through the value chain approach • Climate Change and Disaster Risk Reduction: Regional Programme on the 2030 Agenda and climate-smart agriculture; Strengthening the agro-climatic information system to improve the agricultural drought monitoring and early warning system in Viet Nam (NEWS), pilot study in the Ninh Thuan province; Climate Smart Agriculture: Capturing synergies between mitigation, adaptation, and food security; Strengthening capacities to enhance coordinated and Integrated Disaster Risk Reduction Actions and Adaptation to Climate Change in Agriculture in the Northern Mountain Regions of Viet Nam
France, AFD	<p>AFD in Viet Nam is promoting inclusive sustainable development, focusing on preserving the environment and ensuring social equity. The 2015 - 2020 intervention strategy highlights three areas and levels of engagement, with a new strategy under preparation. Two of the current focal areas are relevant for the ENRM/CC agenda: (i) Support to the modernization of the productive sector with a high socio-environmental impact; and (iii) Support to climate change mitigation. Relevant ongoing projects:</p> <ul style="list-style-type: none"> • Supporting rural development in the provinces of Binh Dinh and Hung Yen. EUR19.1 million. 2015-2020. AFD is contributing to increasing agricultural production in the two provinces of Binh Dinh and Hung Yen by financing the construction of water networks and building the water resources management capacity of local authorities. A climate change adaptation project. • Controlling rising water levels in the provinces of Ninh Binh, Ha Tinh and Can Tho. EUR53.5 million. The project aims to adapt to the increase in the frequency and violence of extreme climate events and the rising sea levels in the provinces of Ninh Binh, in the south of the Red River Delta (an essential region for water supply and storage during the dry season), Ha Tinh, in the coastal region of the central north, and

Organization	Description of Portfolio
	in the city of Can Tho, in the Mekong Delta (a region highly vulnerable to the consequences of climate change).
GCF	<p>GCF financing in the ARD sector currently supports a joint ADB/UNDP project that addresses drought through support to expansion of irrigation, improvements in water use efficiency in irrigated production systems, and water resource management in Central Highland Provinces. Relevant existing/proposed projects:</p> <ul style="list-style-type: none"> • Improving the resilience of vulnerable coastal communities to climate change related impacts in Viet Nam. 2016-2022. US\$40.5 million (US\$29.5 million GCF). Strengthening storm and flood protection for coastal communities in Viet Nam through resilient housing, planting and rehabilitation of mangrove forests, and systematized climate risk assessments for the public and private sectors. (UNDP proponent) • Achieving emission reductions in the central highlands of Viet Nam to support National REDD+ Action Programme goals. Approved project concept for 5 year project. US\$52 million (US\$29.14 million GCF). Strengthening of enabling conditions for emissions reduction; reducing the impact of key agri-business supply chains on forests; conservation of existing natural forest through collaborative forest management; and coordination, monitoring and knowledge management. (FAO proponent) • Strengthening the resilience of smallholder agriculture to climate change-induced water insecurity in the Central Highlands and South-Central Coast regions of Viet Nam. Approved project concept for 5 year project. US\$164.5 million (US\$29.7 million GCF). Improved access to water for vulnerable smallholder farmers for climate-resilient agricultural production in the face of climate-induced rainfall variability and droughts; and strengthened capacities of smallholder farmers to apply climate and market information, technologies, and practices for climate -resilient water and agricultural management. (UNDP proponent, with ADB co-financing).
Germany, GIZ, KfW	Germany's new development cooperation with Viet Nam focuses on support for the implementation of the Green Growth Strategy and the acceleration of Viet Nam's industrial competitiveness based on improved labour skills in a future ASEAN common market. Future development programs are to include partnerships with the private sector and civil society.
GIZ	<p>Relevant ongoing projects:</p> <ul style="list-style-type: none"> • Making the Mekong River Delta more flood resilient. 2013-2019. Flood Resilience and Drainage Programme • Information Matters – climate reporting. 2013-2019. Capacity building for ambitious reporting and facilitation of international mutual learning through peer-to-peer exchange • Nationally appropriate mitigation actions (NAMA). 2014-2018. Creation of an overarching framework for nationally appropriate mitigation actions (NAMAs) and measurement, reporting and verification (MRV). • Strategic mainstreaming of ecosystem-based adaptation in Viet Nam (BMUB). 2014-2018. Supporting

Organization	Description of Portfolio
	<p>development of innovative, effective methods, strategies and policy guidelines for ecosystem-based adaptation that are available to land-use and development planners; their systematic integration into the national adaptation policies; and their gradual implementation.</p> <ul style="list-style-type: none"> • Integrated Coastal Management Programme. 2011-2018. Strengthening of coastal zone management around the Mekong Delta to better cope with a changing environment and provide a basis for sustainable growth.
Ireland, Irish Aid	<p>Irish Aid supports national efforts to reduce poverty and increase opportunities, particularly for ethnic minority groups in the poorest and most marginalized areas of Viet Nam. In addition, Irish Aid funding is utilized to promote inclusive economic development and the growth of the private sector. Irish Aid also supports civil society organizations to enable citizens to voice their needs and promote inclusion, gender equality, and citizen's participation in their own development. Relevant ongoing efforts include:</p> <ul style="list-style-type: none"> • Viet Nameese ethnic minority household economies grown in a climate-smart, gender and nutrition sensitive way. 2017-2020. EUR16.8 million
Italy	<p>Future actions of the Italian Development Cooperation will focus on the development of the private sector and vocational training. Of note, among these is assistance for the development of flood forecasting tools.</p>
JICA	<p>JICA is supporting the government in the implementation of its Socioeconomic Development Plan, with a focus on strengthening of institutional systems, human resource development, and modern infrastructure system development. In this regard, of greatest relevance is JICA's support for vulnerable groups. Relevant ongoing support includes:</p> <ul style="list-style-type: none"> • Agriculture / Rural development: Establishment of Cryo-bank System for Viet Nameese Native Pig Resources and Sustainable Production System to Conserve Bio-diversity; Development Planning of Agriculture Sector in Nghe An; • Agriculture Development in Phan Ri - Phan Thiet Phase II; Improvement of reliability of safe crop production in the northern region; Irrigation System Upgrading Project; Support for Farmers' Incomes Improvement through the Revitalization of Integrated Agriculture in Hilly Areas; Strengthening of Agriculture and Livestock Management for small-scale farmers in Hue City; Livelihood Diversification through Heritage Tourism in Remote Agricultural and Fishery Villages. • Environmental Management: Strengthening Capacity of Water Environmental Management in River Basin; Sustainable Natural Resource Management Project; Green Growth Promotion in Halong Bay area, Quang Ninh province; Protection Forests Restoration & Sustainable Management; Water Environment Improvement Project • Climate change / Disaster Prevention: Multi-beneficial measure for the mitigation of climate change in Viet Nam and Indochina countries by development of biomass energy; Project to Support the Planning and Implementation of NAMAs; Development of Landslide Risk Assessment Technology along Transport Arteries in Viet Nam; Project for Disaster & CC Countermeasures Using Earth-orbiting satellites (EOS);

Organization	Description of Portfolio
Republic of Korea, KEXIM, KOICA	<p>Vinh Phuc investment climate improvement project</p> <p>The Republic of Korea's Country Partnership Strategy has three focal areas, two of which are relevant to the ENRM/CC agenda: (i) environment and green growth, with priorities in water and sanitation, waste management; and response to climate change; and (ii) human resource development: technical and vocational education and training. Specific areas of current support are:</p> <ul style="list-style-type: none"> • Capacity building for water management and disease control as a response to climate change. 2016-2020. Support to government's efforts to improve climate change-related water management and disease control capacities with a special focus on the Mekong River, Highlands, and South-Central regions.
USAID	<p>USAID manages a comprehensive portfolio that includes economic growth and governance, civil society, higher education, health (including HIV/AIDS and emerging pandemic threats), environment and climate change, biodiversity, support to persons with disabilities and other vulnerable populations, and disaster assistance. Relevant, ongoing projects include:</p> <ul style="list-style-type: none"> • Viet Nam Forests and Deltas Program. 2012-2021. Accelerates transition to resilient, sustainable development by helping to reduce deforestation and degradation of forests and agricultural landscapes and increase resilience. • USAID Green Annamites. 2016-2020. Supports provinces of Quang Nam and Thua Thien Hue in the Central Annamites landscapes to promote environmentally friendly land use, strengthen biodiversity conservation and increase resilience for vulnerable communities.
World Bank	<p>The WB Country Partnership Framework (CPF) for Viet Nam 2018-2022 aims at three areas of focus: (1) Enable Inclusive Growth and Private Sector Participation; (2) Invest in People and Knowledge; (3) Ensure Environmental Sustainability and Resilience. Relevant to the ENRM/CC agenda, under the first focal area the WB prioritizes to: (i) strengthening economic governance and market institutions; (ii) promotion of private sector and agri-business development; (iii) broadening economic participation of ethnic minorities, women, and vulnerable groups. Under the third focal area: (i) promote low carbon energy generation, including renewables and energy efficiency, and reduce GHG emissions; (ii) Increase climate resilience and strengthen disaster risk management; and (iii) strengthen natural resource management and improve water security. Relevant existing projects:</p> <ul style="list-style-type: none"> • GEF Mekong Delta Integrated Climate Resilience and Sustainable Livelihoods Project. US\$6.09 million. 2018-2023. Enhance tools for climate-smart planning, improve climate resilience of land & water management practices in selected MRD provinces • Forest Sector Modernization and Coastal Resilience Enhancement Project. US\$150 million. 2017-2023. Improve coastal forest management in the project Provinces • Viet Nam-Partnership for Market Readiness. US\$3 million. 2016-2020. Strengthen government capacity to develop market-based instruments to reduce greenhouse gas (GHG) emissions.

Organization	Description of Portfolio
	<ul style="list-style-type: none"> • Mekong Delta Integrated Climate Resilience and Sustainable Livelihoods Project. US\$310 million. 2016-2022. Enhance tools for climate-smart planning, improve climate resilience of land & water management practices in selected MRD provinces. • Coastal Resources for Sustainable Development. US\$6.50 million (GEF). 2013-2019. Improve sustainable management of coastal fisheries in project provinces. • Coastal Resources for Sustainable Development Project. US\$100 million. 2012-2019. Improve the sustainable management of coastal fisheries in the project provinces.

SECAP Assessment Terms of Reference

The Environment, Rural Poverty and Social Development Specialist (RPGS) will be responsible for all aspects of the COSOP dealing with environment, climate change, poverty, ethnic minority and gender issues. The specialist will participate in all consultations and discussions with key stakeholders to ensure that the COSOP design is consistent with government priorities, responds to environment, climate, rural poverty, ethnic minority and gender needs.

The consultants are expected to prepare the Social, Environmental and Climate Assessment Procedures (SECAP) document. Objectives of the SECAP to (i) identify key linkages between rural poverty and the environment; (ii) provide key environmental and social opportunities and actions to influence IFAD support to (name country) rural development efforts towards environmental and social sustainability and climate smart development; (iii) identify priority ENRM, social and CC issues based on IFAD's comparative advantage for policy dialogue with the Government; and (iv) identify an opportunity for an ASAP and/or GEF intervention. SECAP therefore will include: (i) an updated assessment of the environmental (and social/economic/institutional) issues with a focus on agriculture and food security; (ii) identification of links with the other sector policies, strategies and plans; and (iii) provision of specific measures to optimise climate adaptation, environmental management, and resource use in the new RB-COSOP/CSN period for Viet Nam.

For the COSOP report their specific responsibilities will include the following:

- a) prepare the main text sections summarizing the national policy, strategy and institutional context for environment, climate change, rural poverty, gender and the other social issues.
- b) Outline the key lessons that can be derived from IFAD's experience in the country and in similar environments regarding the rural poor, ethnic minority, gender and any other potential target groups and help to prepare an Appendix on IFAD's experience on rural poverty and gender issues in the country and the strategy for the future;
- c) Identify IFAD's strategic niche in helping to access the poor, women, youth in rural areas of the country keeping in mind IFAD's targeting and gender mainstreaming strategies. Identify the main opportunities for project intervention, innovation and scaling-up.
- d) Outline together with the team the key strategic options considered and the criteria on the basis of which the strategic choices were made in the COSOP regarding overall sectors for investment, implementation modalities and project ideas.
- e) Prepare Key File 1 Rural Poverty and Agricultural/Rural Sector Issues and Key File 4: regarding Target Group Identification, Priority Issues and Potential Response.
- f) Prepare the Appendix 4 - Natural Resources Management and Climate Change Adaptation: background, national policies and IFAD intervention strategies and contribute to formulation of appendixes 5 – Country at a glance and 6 – Concept Notes;
- g) Work closely with all technical specialists to review project pipelines for the COSOP to ensure that poverty targeting and gender mainstreaming aspects have been incorporated in them and where appropriate develop gender specific proposals that include justification and rationale, key project objectives, identifies geographic areas of intervention and target groups, ownership, harmonization and alignment, components and activities, costs and financing, organization and management and monitoring and evaluation indicators as well as specify risks and timing;

- h) Together with other team members review the Performance Management Framework and ensure that gender indicators are indicated and dis-aggregated where applicable.
- i) Identify areas for policy dialogue in rural poverty and gender issues and the specific opportunities which IFAD projects present for using its financing for policy leverage.
- j) Participate in the COSOP design mission meetings and consultations as required including meetings with key Government agencies and in the COSOP consultation workshop;
- k) Ensure that all outputs specified are provided to the team leader according to the agreed timelines.
- l) Any other task required by the mission leader or CPM.

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COSOP preparation process

Important changes in the programming context

1. The COSOP consultation process was shaped by three key contextual factors, pertaining both to Government and IFAD:
 - Viet Nam's graduation from blend to IFAD ordinary lending terms in January 2018;
 - Government's new debt management policies that require provinces to repay up to 70% of IFAD loan to the Ministry of Finance and establish more restrictive eligibility criteria for loan financing;
 - The absence of a country programme evaluation (CPE), the last exercise having taken place in 2011.
2. Most of the investments tools of the current COSOP, including training, technical assistance and foremost the competitive (matching) grants for co-investments for common interest groups and Public Private Partnerships, would not be eligible anymore under the current Government regulations. In order to remain relevant in Viet Nam, IFAD needed to develop innovations for rural development that foster the fast growing socio- economic development in Viet Nam while ensuring a balanced and inclusive growth of the rural population and especially disadvantaged groups such as Ethnic Minorities. Hence the need for the COSOP to provide a fresh vision in support of Government policies and programmes for the next Medium Term Plan 2021-2025.

Main steps in the preparation process

3. To meet this challenge, and to make for the absence of a CPE, the IFAD country team adopted an intensive and gradual consultation process that offered repeated opportunities to engage with a wide range of stakeholders and decision makers at each stage of the process, and gathered a high powered design team composed of senior national and international consultants under the leadership of the Country Director.
4. A team of senior national consultants conducted an **external assessment** of the programme in December 2017 and presented its conclusion in a stakeholders' workshop in January 2018 to an audience composed of selected development partners, private banks and of government agencies including the Country Programme Management Team in Viet Nam. The latter is composed of:
 - Focal points, Ministry of Planning and Investment
 - Focal points, Ministry of Finance
 - Focal points, Office of the Government
 - Focal points, Ministry of Foreign Affairs
 - Focal points, Ministry of Agriculture and Rural Development
5. Subsequently, the annual country programme review was held in February 2018 based on a consultancy report, to discuss implementation performance and ways to improve it. The workshop aimed also at understanding Government strategy and plan for the use of external resources, to sharpen the analysis of IFAD comparative advantage in the new context, including the role of non-lending activities, and identify major orientations and initial ideas for the next COSOP.
6. In March and April, the **COSOP completion review** and a series of **COSOP preparatory studies**/events were conducted in parallel, culminating with the review by the CPMT of the COSOP Completion Report and the way forward. The studies covered the following topics:
 - Opportunities and challenges in agriculture and rural development
 - Updates on the policy framework;

- -Rural finance and value chain finance
- Nutrition review note
- Gender, Ethnic minorities, youth and poverty: current context analysis, opportunities and challenges (Quang is conducting)
- Workshop on MFI development in Quang Binh, 12-13 April 2018

7. The two-day **COSOP review workshop** gathered a wide range of stakeholder CPMT, GACAs (representatives from MPI, MOF, MOFA, MARD, OOG), line ministries, State Bank, NTP offices, mass organizations (Farmer Union, Women Union), PPC leaders (Leaders of Project Steering Committees), project management staff, representatives from private sector, representatives from VCCI and SME Associations, commercial banks and MFIs in addition to IFAD's international partners, co-financiers and the IFAD Country Office Director and staff.

8. Besides presentations and brainstorming sessions that involved policy makers and discussed the conclusions of various preparatory studies, the participants devoted a full day to sharing knowledge and addressing challenges faced by the ongoing IFAD funded programmes. In group and plenary discussions participants identified best practices in implementing the IFAD-supported value chain development instruments. Views and opinions from IFAD partners solicited on how to increase sustainability and institutionalization of the IFAD-supported innovations. A "clinics" session at the end of the workshop reviewed the most critical issues faced by all the programme stakeholders, in particular the Government officials at the concerned Ministries and PPCs as well as possible solutions.

9. A **first IFAD design mission on the COSOP** was carried out from 17 September to 7 October 2018 to hold consultations with various stakeholders and to develop a first draft COSOP and proposals for investment projects and non lending activities under the IFAD country programme. The team was predominantly composed of consultants that have been involved in the preparatory studies.

10. During the course of the mission consultations were held with representatives of a number of government ministries and other key actors in the ARD sector, including from MOF (Departments of External Debt Management, International Organizations), MPI (Department of Science and Technology, Agriculture, Foreign Economic Relations), MARD (Departments of Science Technology, International Cooperation, Planning, Cultivation, Fisheries, Forestry, NCO for NTP-NRD, CASRAD, Viet Nam Agriculture Academia, IPSARD), MoNRE (Division of Science, Technology and International Cooperation), the State Bank of Viet Nam, Viet Nam Bank for Social Policies (VBSP), VCCI; Multilateral and bilateral donors and international organizations including WB, ADB, UNDP, FAO, GIZ, JICA, KOICA, Netherlands Embassy, Australian Embassy and AFD; Non-Government Organizations including SNV, Helvetas; CIAT, ILRI, CIRAD; the private sector including VinEco Ltd.; Mass and Civil Society Organizations including Viet Nam Farmers' Union, Viet Nam Womens' Union, and Viet Nam Committee of Ethnic Minorities Affairs.

11. **Two regional consultation workshops** were held, organized jointly by MOF and IFAD, in Thai Nguyen (24 September) for the Northern mountainous provinces (Bac Kan, Bac Giang, Lai Chau, Lang Son, Yen Bai, Thai Nguyen and Tuyen Quang provinces), and in Da Nang (27 September) for the central provinces (Gia Lai, Dak Nong, Quang Binh, Ninh Thuan and Kon Tum provinces). Participating in those workshops were representatives of the provincial governments. The workshops examined the potential for IFAD to add value to Government programmes in these provinces (priorities, challenges and solutions) with regard to a variety of topics including local development, climate change adaptation, value chain and markets, poverty reduction and gender equity

12. Additional consultations took place during a *mission field visit to Bac Kan* province to engage with the PPC and its line agencies, the CPC of (Quang Thuan

commune, Bach Thong district) and representatives from its village communities, as well as two rural SMEs.

- **Two wrap-up meetings** were held, respectively, at the Ministry of Finance and Ministry of Planning and Investment to present the mission's findings and recommendations.

13. A first draft of the **COSOP report** was prepared by end October 2018. Upon receipt of the country team's feed-back, the mission team leader prepared a revised draft in January 2019 which was subsequently reviewed by Government and IFAD, to be then followed by an **OSC meeting in May 2019** and submission to the **Board of IFAD in September 2019**.

Engagement with civil society

Engagement with the civil society, especially the rural society is not new for IFAD. It is in fact one of its trademarks and demonstrated comparative advantage. Over decades of engagement, using bottom-up participatory approaches, IFAD has built a capillary network of interrelated community-based organization and linked them up with local government agencies while bringing their voice and concerns to influence policies and programmes. This quiet, constant day to day grassroots empowerment efforts combined with a direct, concrete dialogue over concrete development interventions does amount to a considerable amount of advocacy work. The latter, while not necessarily visible, is nevertheless quite effective as a powerful agent of change in rural societies, especially the most remote and least privileged ones. It has also demonstrably influenced and facilitated the evolution of public policies and those of other financing agencies active in the agricultural and rural sectors.

This work and its impact is most perceptible at provincial and commune levels where IFAD has outreached over time to 11 of the poorest provinces of the country. In Viet Nam, IFAD engagement with the civil involve multiple stakeholders, including local and central government, service providers, project and provinces, farmers union (VN), Central women union, NGOs, etc.

In a context of decentralization, the engagement with the civil society has to involve local government and community structures. All ongoing and recent projects have a component on engagement and capacity strengthening at the levels of the local government, the communities and farmer groups and organisations.

It is also difficult to separate the engagement with the civil society from the engagement with professional organisations. The ongoing regional grant Medium-term Cooperation Programme with Farmers' Organizations in Asia and the Pacific (MTCP) Phase Two (soon to be followed by a third phase) focuses on strengthening farmers organisations in the Asia and Pacific). The MTCP programme in VN started with a review of the structure of farmer organisations, professional associations (horticulture..etc.), and Community based organisations as a basis for the preparation of a partnership framework by which some of the IFAD resources channelled through investment programmes will be supporting CBOs, cooperatives in particular. .

While the foundations of a substantial engagement with the civil society exist in Viet Nam, there is a need now to consolidate past efforts in order to leverage more systematically the potential of civil society networks. This should in turn increase IFAD's capacity to influence sector policies while mainstreaming and scaling-up innovations.

There is a clear need and intention for IFAD to be more pro-active in this domain in future. In the new COSOP, IFAD will not shy away from taking the lead, when necessary, of a coalition of actors that are interested and engaged in a specific reform agenda on

rural development. Supervision mission could be geared to spend one entire day of the mission to engage systematically with civil society organisations, as part of their field trips. The feasibility of new ideas such as mini test groups that are each representative of a particular segment of the target group could be established to provide sounding boards for a range of ideas and interventions, leveraging digital technologies to engage in real time dialogue and more generally offer increased opportunities of engagement by civil society.

Strategic partnerships

In this annex we describe the main types of IFAD partnerships and how they will be leveraged to achieve the COSOP targets.

It is worth recalling at the outset, that IFAD has maintained, over several decades, a close partnership with the main counterpart ministries, including: Finance; Planning and Investment, and; Agriculture and Rural Development. Its own approaches and policies that emphasise people's participation and community empowerment have also created a network of community based organisations and mass organisations that have been leveraged for increased project effectiveness and impact.

Co-financing with other IFIs or bilateral agencies has also been a regular feature of IFAD programmes in Viet Nam, like in many other countries. A case in point is the co-financing by the Government of the Netherlands of technical assistance to IFAD projects in the Mekong region.

More recently, as IFAD developed its field presence and further decentralised its structures, it has been increasingly able to engage in various donor and UN coordination fora. For example, IFAD collaborates with the World Bank, the Asian Development Bank and bilateral agencies in the framework of the Mekong Delta Working Group which is co-chaired by the World Bank and Germany.

Partnerships to support COSOP strategic objectives

1. In order to achieve its strategic objectives, this COSOP builds on and expands the scope of long-standing IFAD partnerships both with national institutions and the private sector. The IFAD country programme will continue to build and strengthen alliances with the NTP's Coordination Offices, provincial and local governments, national policy research institutes, universities, and civil society organisations (community based organisations as well as farmer and women unions), to carry out deeper policy and technical analysis based on practical experience.
2. Policy engagement is becoming an increasingly permanent feature of IFAD programmes. The Institute of Policy and Strategy for Agriculture and Rural Development (IPSARD) has benefitted from a new Regional grant of IFAD to strengthen selected think tanks in the Mekong region. IPSARD is a public science and technology institution under the Ministry of Agriculture and Rural Development (MARD), established in 2009. As the think tank of MARD, IPSARD is in charge of scientific research, technology transfer, international cooperation, policy advice, baseline surveys, information, training and services in the field of agriculture and rural development.
3. The current KM Plan will be revised to foster a more integrated approach linking project Monitoring and Evaluation, Innovation Management, Scaling-up and Policy engagement functions in a continuum that leverage the resources of a network of stakeholders and partners. Beyond project resources, IFAD would also use its resources available from regional and country-level grant projects as well as its SSTC grants to support for implementation of the KM Plan.
4. During this COSOP, IFAD will also engage in a new partnership with the State Bank of Viet Nam and other partners that compose the rural and agricultural finance institutional infrastructure, with particular reference to Strategic Objective 2.
5. During the COSOP 2012-2017, Public private partnerships were instrumental in facilitating private sector investments in agricultural value chains. With the initiation of public-private partnerships, the private sector plays a more important role in providing education and training services to the poor. Leveraging the resources and the knowledge of the private sector will actually be a central feature of this COSOP through a renewed approach to Public Private Partnerships and Value Chain Development. Engaging with

new partners that have developed innovative approaches to PPPs, such as the sustainable trade initiative (IDH), will enable IFAD to renew its approaches while building on its own experience and to further expand its policy influence on topics of relevance (e.g. agrochemical issues, sustainable training curricula).

Box: Exploring the potential of new partnerships: the Sustainable Trade Initiative (IDH) case.

IDH's portfolio in Viet Nam includes 6 sector programs including cocoa, coffee, cotton, spices and Tea. IDH works through public private cooperation agreement signed by key partners to establish sustainable supply platforms, obtain sustainable certification for producers and promote action plans and good governance (e.g. Coffee Coordination Board, the Spices Task Force) for the sustainable development of the value chains it is engaged in. It will at the same time provide leverage to the partners for achieving goals of common interests they are pursuing.

The partnership with IDH is expected to enhance the innovation management capacity of the IFAD programme in Viet Nam. IDH has better understanding and access to private sector players in the value chains while IFAD has privileged access, understanding and leverage with policy makers and provincial authorities. There is great potential in co-designing projects and in having IDH pilot new solutions (prototyping), while IFAD can facilitate IDH exit strategies after the solutions proved effective at small scale. Both IFAD and IDH can join forces to expand the solutions to new areas and sectors of activity of relevance to the target groups while minimizing the risks of such ventures

6. One of the most important priorities of the new COSOP is to renew the modalities of its engagement with the private sector and to foster wider collaboration, organization and integration within value chains of particular relevance to poverty reduction. IFAD is also called to renew its vision and instruments of interventions to meet the debt management policy challenge while engaging in new partnerships. The country team will explore the scope for involving Viet Nam in the new Agri-business Capital Fund initiative⁶⁴ that will be launched by IFAD in 2019 in partnership with AGRA, the European Union, and Luxembourg.

Key strategic partnership and donor coordination

7. Past IFAD experience in Viet Nam shows that COSOP's Non-lending activities such as policy dialogue, knowledge management and partnership building have been instrumental in making a good contribution to national policy and institutional changes. A case in point is the exchange of experience and knowledge between IFAD and ADB, the latter having adopted and adapted a number of approaches in its own projects based on IFAD prior experiences.

8. Beyond the above-mentioned partnerships proposed to specifically meet this COSOP's strategic objectives, IFAD will also engage with bilateral aid agencies on themes of common interest, with an aim to increase IFAD's credibility and visibility and as part of its policy engagement work.

9. the breadth, depth and intensity of the natural resources and climate change adaptation-oriented interventions would be dependent upon ability to obtain grant financing and/or leverage partnerships with other organizations (e.g., FAO, GIZ, JICA)

⁶⁴ This initiative will be focused on Africa to start with and progressively expanded to other regions, depending on levels of resource mobilisation achieved.

for technical assistance, studies, knowledge management processes, technical quality control, institutional capacity building, training, and extension.

10. In this context, the partnership with the Green Climate Fund (GCF) will be actively sought. Other possible partners with whom collaborative initiatives could be pursued include the European Union (EU) for technical assistance and institution building efforts, Canadian and Irish aid agencies for policy and advocacy work, and Germany for environment sustainability and climate change resilience.

Partnerships with other members of the United Nations development system

11. The UN has an important role to play in supporting multi-stakeholder partnerships for human rights, inclusion and equity. Under the umbrella of its One Strategic Plan (2017-2021), the United Nations system provides prioritized support in three focus areas, namely: (i) inclusive, equitable and sustainable growth, (ii) access to quality essential services and social protection; and (iii) governance and participation. While IFAD's work is relevant to all three focal areas, its programme offers more opportunities for collaboration on the themes of inclusion, equity and climate change adaptation/mitigation. Specifically, it makes direct contribution to Focus area 1 (investing in people) and Focus area 3 (fostering prosperity and partnerships).

12. As the One Strategic Plan puts it, "the nature and inter-connectedness of the SDGs underscores the importance of multi-sector collaboration, and this will require new and strategic partnerships involving coordinated efforts of many different stakeholders". IFAD is part of the UNCT and monitors with its partners the implementation of the current One Strategic Plan. In particular, it co-chairs the results group on climate change. IFAD will participate in the design of the future UNDAF thus ensuring that the interests of small holder farmers and of the most vulnerable rural populations are effectively taken into account. Furthermore, the country programme team will explore all opportunities to engage in partnerships and coordinate its actions on the ground with initiatives aimed at addressing high rates of malnutrition among ethnic minorities, be it by public services or organisations such as UNICEF and FAO.

Collaboration with other Rome-based agencies⁶⁵.

13. FAO is already a strategic partner of IFAD in Viet Nam. The close collaboration with FAO enables IFAD to leverage high level technical expertise in support of the design and implementation of its projects or for its policy engagement work. FAO co-chairs with IFAD the results group 3 on climate change and environment as part of the One Strategic Programme implementation arrangements. The FAO Country Programming Framework (CPF) for 2017-2021 aims at 4 priority areas: (i) Increased food security with focus on alleviation of hunger, malnutrition and food safety concerns; (ii) Sustainable development of the agriculture sector (including crop production, livestock, fisheries and forestry), contributing to the national Green Growth and other strategies on improved natural resources management and environment protection; (iii) New Rural Development and Sustainable Poverty Reduction; and (iv) Enhancing resilience of communities to disasters and threats.

14. There are clear synergies and complementarities between IFAD and FAO's programmes including, in particular, food and nutrition security as well as climate resilience and disaster management, to mention but the most important areas. As a particular case in point, the country team will explore the possibility of a joint collaboration with FAO country office in the framework of the preparation of a joint GCF proposal.

⁶⁵ The World Food Programme is not present in Viet Nam.

South-South and Triangular Cooperation strategy

I. Introduction and Background

1. Viet Nam has designed and benefitted from South-South Cooperation (SSC) initiatives for decades. Starting from the early 60's, the country established bilateral cooperation agreements with other developing countries, for example on livestock and milk production, in particular with India and Cuba. During the 60's, China was one of the most important SSC partners - even before the revolution - through the provision of maize, rice, vegetables, and the provision of technical assistance, inter alia on irrigation technologies.
2. After the reforms in the 80's, when Viet Nam pursued its transition into a market-based economy, the country also established ad hoc bilateral cooperation agreements with Africa, notably with countries such as Angola and Mozambique, sharing a similar economic and social system. More recently, it also engaged with Latin American countries (Venezuela and Argentina, among others), by providing TA on rice cultivation. In exchange, it received technical cooperation on livestock, production of new soybean varieties, etc.
3. The Mekong delta has always represented a natural aggregator for SSC partnerships, where for example, after the food crisis in Cambodia and Laos and the collapse of their food sector, Viet Nam provided these countries with rice, fertilizers and chemicals. Most Mekong countries also transitioned into market-based economies starting from the 80's, increasing the volume of exchanges on food security, policy, aquaculture, etc. After the economic reforms in the 80's, the interest of Mekong countries in such partnerships grew to include the exchange of good practices on institution-building and agricultural policies, in addition to technical assistance on food security.
4. Cooperation within the ASEAN countries has been also very intense in the last decades, for instance with Thailand, the Philippines, China, on issues such as biotechnology, irrigation, water management etc. Exchanges took place mainly across universities and research centres. Despite the recent political and cross-border tensions, China remains the main market for agriculture products (e.g. rice, rubber, vegetable) and fishery. China and Viet Nam rely on each other for the provision of fertilizers, seeds (such as rice), energy and mineral resources. Linkages between the countries is also very strong in terms of trade, tourism and investment.
5. In recent years, Viet Nam has strengthened the use of SSC beyond the mere exchange of agricultural technologies, to cover, for instance, financial and fiscal reforms, macroeconomic policy, business development in agriculture. Financial cooperation is another form of SSC that is assuming increased importance; a recent example has been the strong financial support provided to Cuba in the face of that country's economic challenges.
6. In the last 20 years Viet Nam has realized it would also benefit from partnering with triangular partners, in particular leveraging the potential and convening power of multilateral institutions such as FAO, IFAD and the UNDP. Among the main priorities of Viet Nam's engagement on South-South and Triangular Cooperation (SSTC) is the need to work with the private sector, which is emerging and very active in the country, investing in rice, aquaculture, horticulture, animal husbandry, fisheries. Their main export markets are China and Europe.
7. Against this backdrop, it is clear that potential opportunities exist for IFAD to leverage SSTC in Viet Nam, the new ODA law and lending terms notwithstanding.

Resources: [IFAD SSTC Approach](#)

II. IFAD Involvement

8. **IFAD's contribution.** Given its experience in the country and its latest changes and reforms on SSTC at the corporate level, IFAD could play a clear role in leveraging SSTC in Viet Nam, for better livelihoods of small holder farmers. This role would fit in well with the new engagement strategy, which is based on innovative approaches. What follows is an outline of the most important areas that IFAD may want to take into account to engage with Viet Nam on SSTC.

9. **The importance of involving the private sector.** One of the most important priorities of the new COSOP is to find an appropriate engagement with the private sector. This includes not only small and medium-sized enterprises, large corporations, but also smallholder farmers and their cooperatives, who are part of the equation and need to be fully embedded in designing effective private sector strategies aimed at improving value chains, promoting better access to markets, and establishing linkages with other countries.

10. Private sector organizations should be, among other things, brought together in knowledge exchange platforms to better understand how to address their development solutions, which in some cases; for instance those related to the exploitation of value chains, which Viet Nam cannot adequately support alone. Large agricultural companies and corporations need a reliable and sustainable supply of produce coming from smallholder farmers, but they often lack sufficient capacity to engage at a higher level. An opportunity presents itself to support farmers, cooperatives and SMEs in capacity building through SSTC; for instance through the sharing the solutions from SMEs and companies from other countries on how to set up and improve value chains.

11. **Policy exchanges in agriculture.** Viet Nam has been growing at a very fast pace in the last decades. Such a fast development requires the country to continuously fine-tune and review its policies and regulatory frameworks, capitalizing on the successes of some of them, and discarding those that do not adequately respond to the development challenges. One area where IFAD could help through SSTC is to facilitate policy exchanges across the region and beyond that would allow a better benchmarking of agriculture and rural development policies and regulatory frameworks in order to foster learning opportunities and import good practices from other countries, or export experiences from Viet Nam to other countries.

12. **Rural development solutions.** There is a wealth of institutions in Viet Nam that could share their experiences, innovations and technologies, in particular on resilience, climate change, value chains etc. IFAD should engage with civil society organizations, research centers and government institutions to collect and disseminate rural development solutions implemented in Viet Nam abroad, and support the uptake of solutions from other countries in Viet Nam. This could be done through a blend of initiatives, for instance by designing content for the Rural Solutions Portal (www.ruralsolutionsportal.org), or by promoting regional solutions-sharing dialogues.

13. **Financing options.** Even though the new ODA decree and lending terms have changed the way IFAD will design its loans to Viet Nam – by focusing on "hardware" initiatives rather than capacity building and training – SSTC continues to be a very important and relevant cooperation modality. Financing SSTC initiatives may be challenging, but will require IFAD to approach traditional and non-traditional donors and partners, given their increasing interest in SSTC. Options include the Government and bilateral donors such as the Japan International Cooperation Agency (JICA), the Korean International Cooperation Agency (KOICA). Other agencies, such as the FAO (through the China-FAO SSC Trust Fund), have also expressed interest in cooperating with IFAD on SSTC in the future.

III. Areas of priority for cooperation in the next COSOP

14. Given its experience in the country and the corporate reforms aimed at strengthening the mainstreaming of SSTC into its country programmes, IFAD is in a position to play a clear and explicit role in leveraging SSTC in Viet Nam for better livelihoods of the country's smallholder farmers. This role would well fit in the new engagement strategy. A few proposals for engagement are presented below:

- a. **Support the private sector in improving their engagement in value chains through B2B and C2C linkages.** IFAD could play a key role in facilitating business-to-business (B2B) and community-to-community (C2C) linkages which would bring together private sector entities and communities across countries in the region and beyond. Sharing private-sector experiences across countries could be instrumental in supporting local smallholders and communities to improve their value chains, in particular (but not limited to) post-harvest activities such as distribution, transportation and marketing of their produce. Farmers would benefit from being better connected to local markets and to other markets abroad, for instance through the harmonization of food safety standards, or the design of certification schemes, or the development of quality standards that would facilitate the export of their produce, as well as trade exchanges in general. This type of B2B/C2C dialogue could be achieved for instance by building regional/sub-regional platforms for knowledge and solutions exchanges, or providing solid and targeted market research, with a view to enhancing the capacity of local producers, cooperatives and larger companies, to export and link to new (and foreign) markets. In order for this approach to be fully effective, IFAD should engage with the local and national private sector, but should also at a more institutional level, involving government institutions and departments, and bringing together national leaders, as well as Agricultural Cooperative Departments, in such solutions exchange platforms.
- b. **Promote policy exchanges on agriculture and rural development.** When designing institutional reforms, or during the formulation of policies and strategies, Viet Nam could benefit from engaging with international partners to share lessons and collect experiences from other countries. IFAD could promote SSTC to facilitate policy exchanges that would allow for a better benchmarking of domestic agriculture and rural development policies to foster learning opportunities and replicate good practices from other countries; or export experiences from Viet Nam in other countries. This would allow for the setting up of more effective regulatory and institutional frameworks, for example for scaling up and mainstreaming the role of women in agriculture and rural development, or on improving value chains. For instance, a recent project by the World Bank is facilitating institutional reform on the coffee and rice value chains with the participation of private sector entities, government representatives, and farmers. IFAD could follow a similar approach by promoting regional platforms that would allow Viet Nam to benchmark its own institutional and regulatory frameworks with those of the countries in the region and beyond. Such an initiative would provide a meeting space for farmers, organizations and rural institutions with the aim of generating a framework for the promotion and exchange of regional public policies.
- c. **Promote the sharing and uptake of rural development solutions in climate change adaptation and resilience.** IFAD could engage with civil society organizations, private sector, government institutions and others in promoting the sharing of rural development solutions from experiences in Viet Nam, in particular those implemented on climate change adaptation and resilience. This could take place through several channels, for instance by: (i) sharing the solutions through the Rural Solutions Portal; (ii) promoting regional solution-sharing dialogues and events; (iii) launching special initiatives to encourage the uptake of solutions across countries in other development contexts.

Country at a glance

Figure 1. Country profile in 2016

Population (GSO and UNFPA, 2016)	90 493 million Male: 49.3% Female: 50.7% Urban: 33.1% (urban youth 15-29: 30%) Rural: 66.9% (rural youth 15-29: 70%)
Annual population growth rate (GSO and UNFPA, 2016)	1.06% (2009-2014 average)
Sex ratio at birth (GSO, 2014)	112.2 male births per 100 female births
Age structure (UN DESA, 2017 estimates)	0-14 years: 23.0% 15-24 years: 15.5% 15-29 years: 24.8% 25-54 years: 45.2% 55-64 years: 9.2% 65+ years: 7%
Ethnic groups (GSO, 2010)	Kinh 85.7%, Tay 1.9%, Thai 1.8%, Muong 1.5%, Khmer 1.5%, Mong 1.2%, Nung 1.1%, Hoa 1%, Other 4.3%
Working age population (15-64 years) (UN DESA, 2017 estimates)	70%
Labour force population (GSO, 2016)	53 984 000 Rural: 68.7% 15-24 years: 14.8% 15-29 years: 26.4%
Labour force participation rate (GSO, 2016)	15 years and over: 77.8% (83.0% male; 72.9% female) 15-24 years: 59.8% (63.7% male; 55.7% female; 49% urban; 65% rural) 15-29 years: 69%
Unemployment rate (GSO, 2016)	Total population: 2.33% (2.39% male; 2.26% female) Urban population: 3.37% Rural population 1.82% 15-24 years: 7.03%* (6.8% male; 7.3% female; urban: 11.9%; rural: 5.2%) *7.4% in 2016 (GSO, 2017)
Informal employment (GSO, 2015)	62% out of total employment (37% urban, 75% rural) 15-29 years: 75%
Labour force by occupation (GSO, 2016)	Agriculture: 44% Industry: 22.8% Services: 33.2%
Birth rate (GSO and UNICEF, 2015)	Crude birth rate: 17.9 births per 1 000 population General fertility rate: 73.3 births per 1 000 women aged 15-49 Adolescent birth rate: 45 births for 1 000 women aged 15-19
Total fertility rate (GSO, 2014)	2.09 children per woman
Death rate (WHO, 2013)	5.8 deaths per 1 000 population
Infant mortality rate (GSO and UNICEF, 2015)	Total: 16.21 deaths/1 000 live births
Life expectancy at birth (WDI, 2015)	Total: 75.77 years Male: 71.2 years Female: 80.57 years

Contraceptive prevalence rate (any method) (GSO and UNICEF, 2015)	Women 15-49: 75.7%
HIV/AIDS (UNAIDS, 2015)	Adults (15-49) prevalence rate: 0.5% Adults aged 15 and over living with HIV/AIDS: 250 000 Deaths due to AIDS: 8 900
GDP (current USD) (WDI, 2016 estimates)	USD 202 616 billion (in official exchange rate 2016)
GDP per capita (World Bank, 2016 estimates)	USD 2 185
GDP growth rate (annual %) (WDI, 2016 estimates)	6.2%
Medium-term economic outlook (OECD, 2017)	6.2% (forecast 2017-21 average)
GDP composition by sector (WDI, 2016)	Agriculture: 18.1% Industry: 36.4% Services: 45.5%
Composition of exports (OECD, 2017)	Machinery/electrical: 42% Textiles: 16% Vegetable products: 5% Mineral products: 3% Plastics and rubbers: 3% Others: 31%
Composition of imports (OECD, 2017)	Machinery/electrical: 33% Textiles: 13% Metals: 10% Chemical and allied industries: 6% Plastics and rubbers: 5% Others: 33%
Human development index (UNDP, 2016)	0.683 (115 out of 188) Above Myanmar (148) and Cambodia (143), below China (90) and Thailand (87)

Financial management issues summary

COUNTRY	Viet Nam		Country Strategic Opportunities Programme (COSOP)
<u>COUNTRY</u> – Fiduciary KPIs:			
Country Fiduciary Inherent Risk:	MEDIUM	Transparency International TI The Corruption Perception Index (CPI) of 33 for 2018 by Transparency International ranked Viet Nam 117 th out of 180 countries, dropping by ten places and two points compared to 2017. Despite the significant efforts conducted in its fight against corruption since 2016, corruption is still one of the three major concerns after pollution and employment. ¹	
Disbursement – Profile:	Ranges from highly unsatisfactory to satisfactory	Public Financial Management (PFM) The latest Public Expenditure and Financial Accountability (PEFA) for Viet Nam was carried out in 2013. The assessment concluded that Viet Nam's PFM system was in a process of change, but that progress was slower than expected due to the ambitious timing of the government's reform program. A major finding of a recent evaluation of the World Bank (2016) is that there was an acceleration of policy actions and capacity improvements between 2012 and early 2016 (not captured by the PEFA) that are largely attributable to or associated with budget support for the establishment of a modern treasury management system (TABMIS) and strengthening of external audit functions. However, achievements in internal auditing and reporting of expenditures were less noteworthy. PFM in Viet Nam continues to suffer from long-standing problems such as nonconformity of financial reporting with international standards, lack of multi-year fiscal projections, carry-over of expenditures to following years, and lack of reporting at the commitment stage that limits the efficiency of TABMIS. ²	
Disbursement - Ratio 2017, 2018, 2019 ⁴ :	2019 - 3.6% 2018 – 21% 2017 – 19,7%		
Pending Obligations:	None		
Financial Management – Profile:	Generally satisfactory with recent declines in performance		
Counterpart Funding – Profile:	Ranges from moderately unsatisfactory to satisfactory	Public procurement procedures have improved, but are not always transparent and open to competition. The prime minister issued Decision 08/2016 in February 2016 to institutionalize the centralized procurement mechanism adopting a framework contract concept that the MOF, with UK and World Bank support. Implementing the new electronic procurement system is expected to take some time. ³	
Country contribution in IFAD Replenishment:	Viet Nam did not pledge for IFAD11	Debt Assessment Viet Nam's sovereign risk rating remains at B, the public debt/GDP ratio fell to 62.4% in 2018, down slightly from 63.2% in 2017. Public debt will remain high in 2019, falling only modestly to the equivalent of 62% of GDP. The official public debt figures exclude the debt of state-owned enterprises (SOEs), which poses an additional and implicit risk to the public finances. ⁵	
PBAS – Programme's cycle coverage:	USD 43 million		
Country income classification:	Lower middle-income	The IMF's July 2018 country report shows a low risk of debt distress, and the gross-financing-needs-to-GDP ratio remains below the 15 percent threshold under all shocks. The assessment highlights possible risks in the Viet Nam debt profile, notably in terms of external financing requirements and foreign currency debt.	
Financing terms (IFAD 11):	Ordinary terms	The volume of Official Development Assistance (ODA) is expected to continue falling because of the government's ambitious infrastructure development plans, as well as growing welfare costs. Exchange and inflation rates Based on the Economist Intelligence Unit (EIU) report of 2019, the inflation in Viet Nam is rising slowly, 2.7% in February and 2.9% in May. The trend of gradually rising inflation since January has stemmed largely from increasing prices of the electricity and the of goods and services that are closely linked to the cost of fuels. Since it is not expected a full rebound in global oil prices in 2019, Viet Nam's inflation to be moderately slower in 2019 than in 2018. The EIU expects the Dong to strengthen slightly against the US dollar in 2019-20. The Government have more than sufficient foreign-exchange reserves to stem any excessive short-term currency volatility (US – China).	

COSOP – Key Fiduciary Observations:

- The Financial Management (FM) performance of IFAD-funded projects in Viet Nam is generally satisfactory with recent declines in performance, and FM risk is low after mitigation measures are in place.

- One particularity of the Viet Nam portfolio is that due to the jurisdiction of the government administration at the provincial level, Project Management Units (PMUs) require to be set up in every province of intervention, increasing operational costs of IFAD funding.

- Project fund-flows are often complex due to the number of districts, communes and beneficiaries involved, but PMUs at province level are generally well organized to manage such complexities. Financial reporting is generally automated at PMU level, with some reliance on Excel for district-level reporting, where automation is not a common practice.

- Viet Nam could face difficulties in obtaining international finance if investors lose confidence in the government's efforts at fiscal consolidation, although this scenario is highly unlikely in 2019-20. The Government is also likely to try to tap the global debt markets more extensively during the period 2019-20. The cost of financing will rise gradually, as Viet Nam will have to rely increasingly on market-based financing as its access to Official Development Assistance from multilaterals declines further in 2019-20.

- The overall increase in public medium- and long-term debt (obtained through official creditors) reflects the government's need to finance ongoing projects, including major infrastructure works. Over the next two years short-term debt will remain relatively stable compared with 2018, averaging US\$24bn in 2019-20. Short-term debt will continue to comprise only a small share of the external debt stock. The main component of the stock will continue to be debt provided on a concessional basis. As low interest rates apply to most of its existing debt, the government is unlikely to struggle to fulfil its debt-servicing obligations.

- Due to the changes in National policies for Official Development Assistance (ODA) and delays in budget approvals, slow disbursement has been affecting the portfolio especially at the beginning of each FY. Nevertheless, projects usually achieve their targets at the end of the FY. This peaked during the supervision mission of CSSP in April 2019, for which the rate for Disbursement was auto-calculated as Highly Unsatisfactory. The ODA constraints could lead CSSP to cancellation according to the new IFAD policy on project restructuring.

Ongoing Portfolio:

Project	Financing instrument	FLX Status (1)	Lending Terms	Currency	Amount (million)	Completion date
AMD	200000043400	DSBL	ASAP GRANTS	XDR	7.8	31 Mar 2020
	200000043300	DSBL	HIGHLY CONCESSIONAL TERMS 0.75 pc	XDR	14.3	31 Mar 2020
CPRP	200000079200	DSBL	HIGHLY CONCESSIONAL TERMS 0.75 pc	XDR	6.5	31 Mar 2020
	200000123600	DSBL	BLEND TERMS	XDR	7.1	31 Mar 2020
CSSP	200000175300	DSBL	BLEND TERMS	USD	42.5	30 Jun 2023
	200000175200	DSBL	LOAN COMPONENT GRANTS	USD	0.5	30 Jun 2023

(1) APPR – SIGN – ENTF – DISB – EXPD – SPND

PORTFOLIO, FM RISK & PERFORMANCE

Project	Financing instrument	Curr.	Amount (million)	Project risk rating	PSR quality of FM	PSR audit	PSR disb. rate	Disbursed to approved
AMD	200000043400	XDR	7.8	Low	Satisfactory	Satisfactory	Satisfactory	58%
	200000043300	XDR	14.3					87%
CPRP	200000079200	XDR	6.5	Low	Satisfactory	Satisfactory	Moderately satisfactory	100%
	200000123600	XDR	7.1					36%
CSSP	200000175300	USD	42.5	Medium	Moderately unsatisfactory	First audit due in June 2019	Highly unsatisfactory	2%
	200000175200	USD	0.5					0%

¹ <https://www.Viet-Nam-briefing.com/news/Viet-Nams-corruption-perception-ranking-declines-2018.html/>² World Bank Evaluation of Public Financial Management Reform 2016³ Viet Nam Evaluation of Public Financial Management Reform 2016⁴ Disbursement RATIO = DISBURSEMENT (12 months period)/ DISBURSABLE (available at beginning of the period)⁵ The Economist Intelligence UnitPrepared by: Álvaro Fernández
Regional Finance Officer

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