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Investing in rural people

Republic of Ghana

Country Strategic Opportunities Programme

2019-2024

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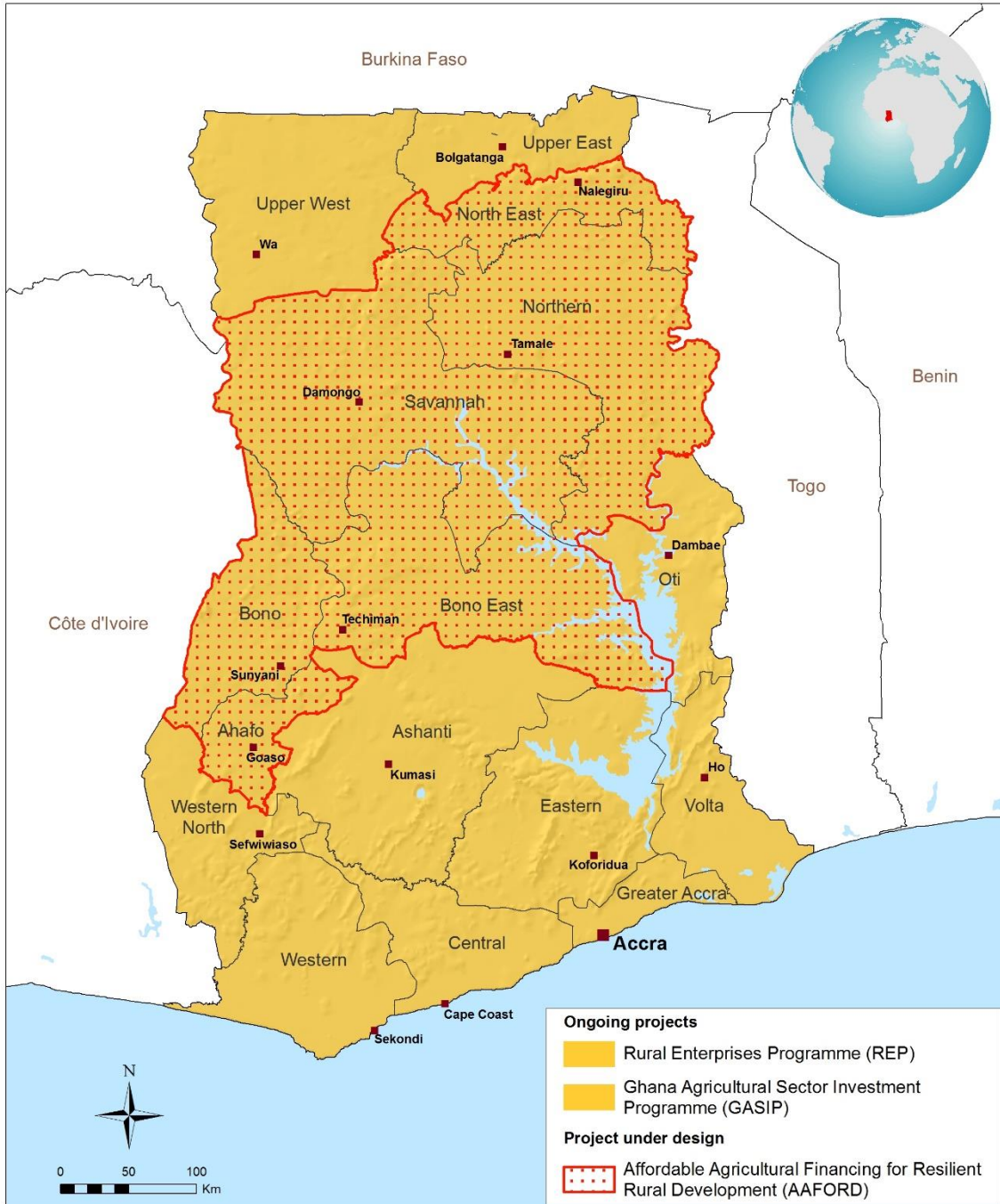
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Abbreviations and acronyms

ABC Fund	Agribusiness Capital Fund
AAFORD	Affordable Agricultural Financing for Resilient Rural Development Project
AVANTI	Advancing Knowledge for Agricultural Impact
COSOP	country strategic opportunities programme
GASIP	Ghana Agricultural Sector Investment Programme
GDP	gross domestic product
GLSS	Ghana Living Standards Survey
IFAD11	Eleventh Replenishment of IFAD's Resources
ILO	International Labour Organization
LEAP	Livelihood Empowerment Against Poverty Programme
M&E	monitoring and evaluation
MSME	micro, small and medium-sized enterprise
MTNDPF	Medium-Term National Development Policy Framework
NBSSI	National Board for Small Scale Industries
NRGP	Northern Rural Growth Programme
PDU	programme delivery unit
REP	Rural Enterprises Programme
RTIMP	Root and Tuber Improvement and Marketing Programme
SDG	Sustainable Development Goal
SSTC	South-South and Triangular Cooperation

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 | 08-10-2019

Executive summary

1. The Republic of Ghana has been one of the strongest performers in Africa in terms of economic growth. It attained middle-income status in 2011 and has experienced a long period of stable governance. Nonetheless, poverty and malnutrition persist, particularly in the country's northern regions.
2. Agriculture remains the primary source of employment for people in rural areas, including the poorest people. Agriculture also provides Ghana with an important source of foreign exchange through exports of agricultural commodities including cocoa, cashews, timber, horticulture and fish.
3. The Medium-Term National Development Policy Framework 2018-2021 guides government policies in the agricultural and rural sectors. Within this framework, Investing for Food and Jobs: An Agenda for Transformation of Ghana's Agriculture was developed in line with the African Union's New Partnership for Africa's Development, the Comprehensive Africa Agriculture Development Programme and Sustainable Development Goals (SDGs) 1 and 2.
4. This country strategic opportunities programme (COSOP) covers 2019-2024 and is aligned with the Government's policy framework as well as Ghana's transition to a middle-income country. It responds to the 2030 Agenda for Sustainable Development, particularly SDGs 1, 2, 9, 12 and 14, and the United Nations Sustainable Development Partnership with Ghana 2018-2022: outcomes 1, 2, 5 and 6.
5. This COSOP has three strategic objectives:

Strategic objective 1: Promote a financially sustainable and inclusive rural transformation by: (i) fostering an enabling environment; (ii) improving the effectiveness of public expenditures in agriculture; and (iii) acting as an assembler of development finance.

Strategic objective 2: Strengthen productivity in inclusive value chain development by enabling smallholder farmers, livestock keepers and fishers to: (i) improve access to technology and innovation; (ii) enhance access to improved production inputs and produce markets through use of certified seeds and agrochemicals; and (iii) bolster climate change resilience and natural resource management.

Strategic objective 3: Strengthen capacities and economic opportunities by: (i) supporting the development of affordable, sustainable agricultural service providers; (ii) strengthening entrepreneurial, business and organizational management skills; and (iii) improving access to financial services.
6. The COSOP will comprise two ongoing programmes: the Ghana Agricultural Sector Investment Programme and the Rural Enterprises Programme (scheduled for completion in 2021 and 2022 respectively), as well as two new programmes. IFAD's lending programme will be complemented by an ongoing grant through the Adaptation for Smallholder Agriculture Programme and possibly new grants.
7. IFAD will use a variety of tools to maximize the number of poor rural people benefitting from emerging economic opportunities, and ensure that those who cannot do so immediately – especially marginalized groups – are supported in acquiring the skills and assets to do so in the future.

Republic of Ghana

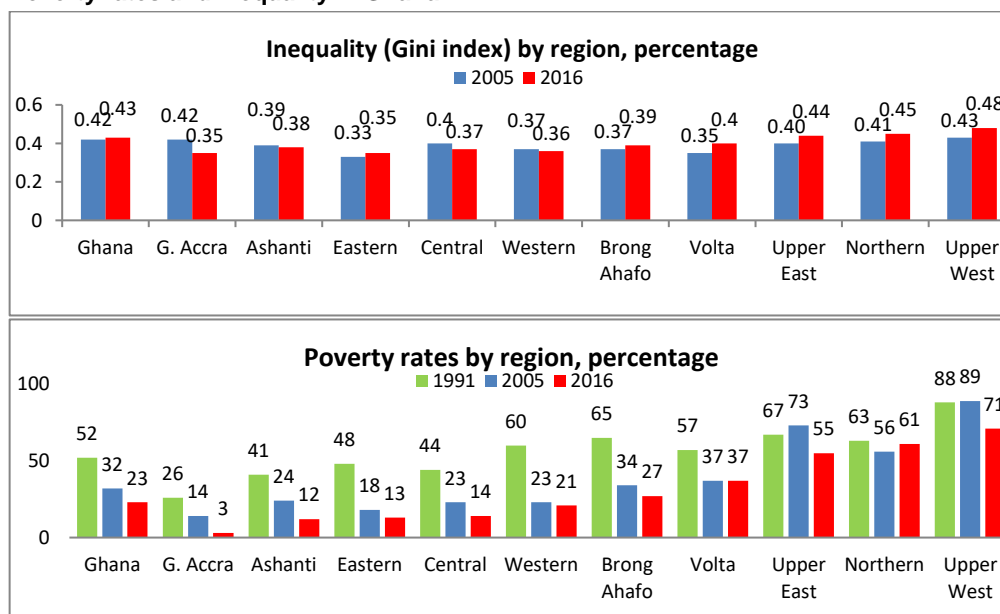
Country Strategic Opportunities Programme 2019-2024

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

1. Ghana is West Africa's second largest economy after Nigeria, and growth in 2019 is projected to be 8.8 per cent – the highest in the world.¹ Annual GDP growth averaged 6.6 per cent from 2000 to 2013. While a sharp drop in oil prices caused an economic slowdown, the economy recovered in 2017 with growth of 8.1 per cent. The economy is highly dependent on exports of a limited number of commodities, including gold, cocoa and oil, and remains vulnerable to commodity price shocks.
2. Poverty remains a largely rural phenomenon. The 2012 census highlighted that 24.2 per cent of Ghanaians are poor and 8.4 per cent are extremely poor, with the poverty rate 3.7 times higher in rural areas than in urban ones. Large disparities remain between the poverty rates in the north (63 per cent) and the south (20 per cent).² The country's Gini coefficient rose from 37 per cent in 1991 to 43.5 per cent in 2016,³ indicating widening inequality (see figure 1 below). Increasing agricultural income is an important means of lowering rural poverty and inequality.

Figure 1

Poverty rates and inequality in Ghana



Source: Ghana Living Standard Survey (GLSS) 3, GLSS 5 and GLSS 7, World Bank calculations and the GLSS poverty profile report.

¹ International Monetary Fund, World Economic Outlook Database (April 2019).

² World Bank, Tackling Poverty in Northern Ghana. Report No. 53991-GH (2011).

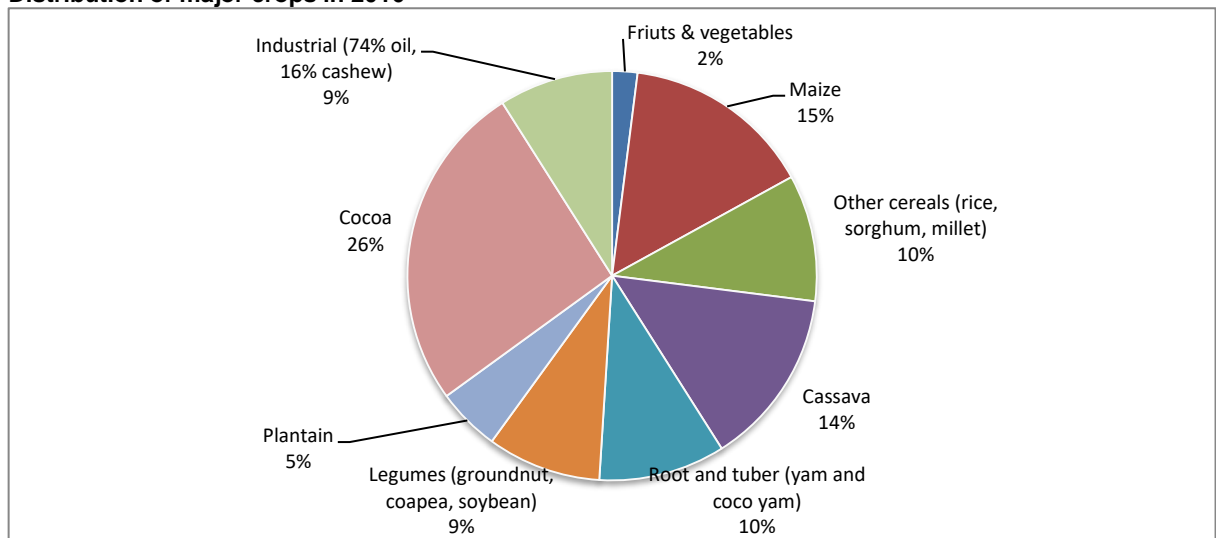
³ United Nations Development Programme (2018).

3. The country's progress is reflected in a range of improved indicators of human development. Ghana's Human Development Index rose 27 per cent between 1990 and 2016. During the same period, the share of births attended by skilled personnel rose from 40 per cent to 74 per cent, and the country's under-5 mortality declined by more than half. Gender parity has been achieved in primary education, and gross primary school completion rose to 100 per cent for both boys and girls by 2017.
4. Notwithstanding this progress, some important socio-economic challenges remain. Malnutrition is among the most persistent of these challenges, especially in the country's northern regions. In the north, food insecurity has led to stunting in 33 per cent of children under 5⁴ – much higher than in the rest of the country. Although production of major food staples has increased, micronutrient deficiencies remain a public health challenge. Significant gender inequality also persists, with 62 per cent of women-headed households falling into the two poorest quintiles compared with 39 per cent of households headed by men. The high rates of underutilized (42 per cent) and unemployed (16.9 per cent) youth are a growing concern.
5. Agriculture remains the primary source of employment for people in rural areas, including the poorest people. Agriculture provides an important source of foreign exchange through the export of agricultural commodities including cocoa, cashew, timber, horticulture and fish. Cocoa generates between 20 per cent and 25 per cent of Ghana's national income, and many jobs. But there is room to increase the supply of agricultural goods since it is estimated that the country produces only 51 per cent of its cereal needs, 60 per cent of the fish requirements, 50 per cent of its demand for meat and less than 30 per cent of agro-based industries' demand for raw materials.
6. Crop production is dominated by cereals, roots and tubers, and cocoa, each of which constitutes approximately 25 per cent of total production. Households with less than 2 ha predominate (49.3 per cent) while 35 per cent have between 2 ha and 5 ha of land.⁵ Major commodities such as cocoa, maize and cassava are predominantly produced on small farms. Larger farms and plantations produce rubber, oil palm, banana, pineapple, coconut and (to a lesser extent) rice, maize and cocoa.

⁴ World Bank (2018).

⁵ GLSS 6 (2014).

Figure 2
Distribution of major crops in 2016



Source: Ministry of Food and Agriculture Progress Report (2017).

7. Access to finance is a key impediment to agricultural development. Constraints include: lack of lending products suitable to the needs of smallholders; high interest rates and unfriendly terms for agricultural loans; a lack of crop insurance and credit guarantee mechanisms; and high operational costs for financial institutions. The Government and development partners have launched several initiatives to address this, including the Ghana Incentive-based Risk Sharing System for Agricultural Lending, the Ghana Commodity Exchange and the Ghana Agricultural Insurance Pool. The concept of village savings and loan associations has been successfully adopted in parts of Ghana.
8. Most of the country's land is governed by customary tenure arrangements. Access to land is among the key constraints for women in agriculture and a major obstacle to private sector investment.⁶ Competition over land and natural resource use can generate conflict and act as a disincentive for investment in smallholder agriculture.
9. Crop production is mostly rainfed, leading to low productivity and vulnerability to climatic shocks, especially for smallholders. Ghana's agriculture is not only vulnerable to climate change, it also contributes to it: agriculture is estimated to be the second largest contributor to Ghana's greenhouse gas emissions after the energy sector. Climate change and environmental degradation impact smallholder farmers through crop water stress due to increasing dry spells and rising temperatures, and degradation of arable land and critical infrastructure (see appendix IV).
10. Ghana's transition to middle-income status will have implications on IFAD's country programme. Appendix II provides different transition scenarios for Ghana's economy between 2019 and 2024. The base case is considered the most likely, with GDP growth averaging 5.4 per cent per year. Under a low case scenario, IFAD's ability to scale up its work in Ghana could be jeopardized – likely due to external shocks. A high case scenario would generate several benefits, including an increase in domestic cofinancing.

⁶ World Bank, Systematic Country Diagnostics (2018).

II. Government policy and institutional framework

11. The Medium-Term National Development Policy Framework (MTNDPF) 2018-2021 is Ghana's primary national development policy. Its four pillars are to: (i) create opportunities for all Ghanaians; (ii) safeguard the natural environment and ensure a resilient environment; (iii) maintain a stable, united and safe country; and (iv) build a prosperous society.
12. Within the framework of the MTNDPF, the policy on Investing for Food and Jobs was developed in line with both the Comprehensive Africa Agriculture Development Programme and Sustainable Development Goals (SDGs) 1 and 2. It lays the foundation for actions to support the Government's flagship projects and programmes, including: Planting for Food and Jobs; Aquaculture for Food and Jobs; the One-Village, One-Dam Project; the One-District-One-Warehouse Project; Planting for Export and Rural Development; and Rearing for Food and Jobs. It also provides mechanisms to support initiatives in other sectors, such as the One-District-One-Factory Programme, and works within the framework of the Government's vision of "Ghana beyond aid" (see appendix XIV).
13. A national policy on micro, small and medium-sized enterprises (MSMEs) is currently being developed in line with the MTNDPF. The National Financial Inclusion and Development Strategy aims to enhance access to finance for 75 per cent of Ghana's adult population by 2023.
14. The Ministry of Food and Agriculture leads the formulation of agriculture sector policies, plans and programmes. Regional and district-level decentralized departments are responsible for implementation and have a dual reporting mandate to district and regional councils, and the Ministry of Food and Agriculture. There are strong links between this ministry and the Ministry of Local Government and Rural Development. The Ministry of Trade and Industry, and the National Board for Small Scale Industries (NBSSI) are responsible for working with MSMEs.
15. The National Climate Change Policy 2015-2020 and the National Climate Change Adaptation Strategy aim to develop effective mechanisms for managing climate change, including climate-resilient agriculture and food systems, and disaster preparedness and response. The objective of the country's nationally determined contributions is to unconditionally lower greenhouse gas emissions by 15 per cent as compared to base scenario, by 2030.
16. Ghana has established a clear legislative and policy framework in order to adhere to International Labour Organization standards on labour and working conditions. It ensures that girls and boys under 16 years cannot legally undertake formal employment. Nonetheless, effective review and enforcement mechanisms are needed to ensure that this policy is observed in practice..

III. IFAD engagement: lessons learned

17. Since 1980, IFAD has financed 16 operations in Ghana valued at US\$830 million, of which US\$312 million was provided by IFAD. There are now two ongoing programmes: the Rural Enterprises Programme (REP) and the Ghana Agricultural Sector Investment Programme (GASIP). Portfolio performance in recent years has been mixed. For example, while REP and the previous Northern Rural Growth Programme (NRGP) have performed satisfactorily, the slow pace of GASIP's implementation has weakened the country programme's overall performance. As explained below and in appendix X, steps are being taken to address this.
18. **Alignment with government priorities.** GASIP was designed as a long-term programme to be implemented in cycles; the Government intended for it to become a pool to attract donor funding. However, this has not yet happened and GASIP has not moved beyond its first cycle. To attract other partners, it must be

aligned with the Government's current priorities. Efforts are now underway to align GASIP with government policies and programmes.

19. **Geographical targeting to enable pro-poor interventions.** Support for national programmes has proven beneficial since it has promoted nationwide institutional development. However, this approach should be combined with specific interventions focused on northern Ghana in line with IFAD's pro-poor targeting policy, given the concentration of poverty in that region.
20. **Building the marketing capacity of farmers' organizations.** The experience of providing support to farmers' organizations in Ghana has been mixed. While support provided through NRGF and the Root and Tuber Improvement and Marketing Programme (RTIMP) has increased their productivity, these organizations require further strengthening in order to market their products and ensure their transformation into viable business entities. Supporting farmers' organizations are a major focus of GASIP and additional efforts.
21. **Role of the private sector.** Experience from NRGF, RTIMP and other projects has demonstrated the private sector's crucial role in supporting smallholders and their organizations by providing inputs, marketing channels and other services. The primary lesson learned is that a lack of access to finance in rural areas is one of the most significant constraints to private sector growth.
22. **Access to rural finance.** The Rural and Agricultural Finance Programme aimed to improve rural communities' access to sustainable financial services. Although it succeeded somewhat in strengthening the capacity of rural community banks and enhancing financial literacy, results were mixed with respect to IFAD's target population accessing loans. The experience showed that efforts to improve access to rural finance need to be complemented by access to inputs, markets, business advisory services and products tailored to the agricultural community. The proposed Affordable Agricultural Financing for Resilient Rural Development (AAFORD) project will reflect these lessons learned.
23. **Land access and conflict resolution.** While there is conflict and competition over access to land and natural resources in Ghana, past experience in West Africa suggests that programme impact can be improved with the introduction of project-level conflict resolution mechanisms.⁷ However, these mechanisms need to be tailored to the local context and be accessible to all stakeholders, providing mechanisms for them to adjudicate disputes in line with formal laws and informal governance arrangements.
24. **Improving the quality and effectiveness of public expenditure in agriculture is an urgent issue.** Results-based management of sectoral spending could generate substantial gains in terms of productivity, employment, and rural poverty reduction without compromising the Government's ongoing fiscal consolidation programme.
25. **Fiduciary management.** The inherent financial management risk in Ghana is rated by IFAD as medium (see appendix IX). Risk mitigation measures include conducting biannual missions to project sites, applying stricter disbursement procedures and conducting thorough reviews of requests on a no-objection basis. The overall disbursement rate was rated as moderately satisfactory for REP and unsatisfactory for GASIP. A project-level procurement risk assessment rated procurement risk as "substantial". Appendix XII details the findings of this assessment and presents risk mitigation measures.

⁷ For example in the 1990s, agro-pastoral action zones in Chad and the Central African Republic provided space for often competing resource users to negotiate and agree on the management of agro-pastoral areas.

IV. Country strategy

A. Comparative advantage

26. **Comparative advantage.** Among the various organizations providing assistance to Ghana, the Government looks to IFAD for its expertise and experience in financing pro-poor agricultural value chains, engaging with the private sector, promoting rural enterprise development and improving rural access to credit.

B. Target group and targeting strategy

27. **Target group.** IFAD-financed projects will target: rural entrepreneurs managing MSMEs; smallholders farming plots of land of less than 5 ha (particularly vulnerable people with a focus on those living in extreme poverty); women and youth 18-35 years; and persons with disabilities. Larger private sector and non-smallholder members of targeted farmers' organizations may benefit from capacity-building and business opportunities, but they will be linked to impacts on the projects' primary target group – extremely poor and vulnerable people.
28. **Special efforts will be made to assist persons with disabilities in rural areas.** Persons with disabilities are often excluded from accessing services and economic opportunities. Ghana has a strong policy and legislative foundation for disability inclusion, but implementation has been a challenge. As the Government unleashes the productive capacity of its population, closer attention will be paid to creating opportunities for this vulnerable group.
29. **Targeting strategy.** Consistent with the Government's policy framework, IFAD will continue to take a nationwide approach. This is consistent with the findings of the country programme evaluation for Ghana, which noted that much of IFAD's success in institutional development in the country is linked to its transition from geographically targeted projects to country-wide programmes. Nonetheless, the focus on northern Ghana will increase since this is where the poverty rate is highest.
30. IFAD-funded programmes will partner with existing interventions such as Ghana's Livelihood Empowerment Against Poverty Programme (LEAP).⁸ Partnerships with LEAP will further the inclusion of youth, women and vulnerable people – especially persons with disabilities – in order to achieve social inclusion.
31. In the past, self-selection has been important to attract self-motivated clients, but has had mixed results in the context of NRGF and other programmes (see appendix IV). In this country strategic opportunities programme (COSOP), steps will be taken to strengthen direct targeting of the intended beneficiary groups. Eligibility criteria will be defined with the participation of community members in a transparent manner. Whenever appropriate, IFAD will work with development partners and other actors that have achieved success with pro-poor targeting in line with the recommendations of the country programme evaluation.

C. Overall goal and strategic objectives

32. The overall goal of this COSOP is to contribute to the achieving SDGs 1, 2, 9, 12 and 14, and promote inclusive and sustainable rural transformation by investing in activities that enable poor rural people to increase their incomes through remunerative and resilient livelihoods.

⁸ LEAP targets households that are extremely poor and have household members that: (i) are over 65; (ii) are caregivers of orphans and vulnerable children; (iii) and have disabilities and lack productive capacity.

33. The COSOP is structured around three strategic objectives that are aligned with the Government's priorities, reflect Ghana's transition to middle-income status, and directly contribute to the United Nations Sustainable Development Partnership outcomes 1, 2, 5 and 6.
34. **Strategic objective 1: Promote financially sustainable and inclusive rural transformation.** Given Ghana's ongoing transition to middle-income country status, the focus will be on pro-poor activities that lessen dependence on concessional resources. These include the following:
- (i) **Fostering an enabling environment for foreign and domestic private investment.** Through its ongoing programme of loans and grants as well as policy dialogue, IFAD will work with the Government and other partners to develop measures and instruments that encourage pro-poor private investments in agriculture.
 - (ii) **Improving the quality and effectiveness of public expenditure in agriculture.** IFAD will work with the Government through policy dialogue and project activities to improve efficiency along specific value chains.
 - (iii) **Acting as an assembler of development finance,** IFAD will use its own limited resources to leverage third-party financing, including domestic and international, public and private finance.
35. **Strategic objective 2: Strengthen productivity in inclusive value chain development.** To improve the effectiveness of spending on agriculture, IFAD will help the Government, smallholder farmers, livestock keepers and others to increase productivity through the following activities:
- (i) **Improving access to technology and innovation.** This will include investing in irrigation, transport infrastructure and mechanization of agriculture to improve the productivity of targeted value chains.
 - (ii) **Enhancing access to improved production inputs and produce markets by supporting the use of certified seeds and agrochemicals.** As part of value chain development interventions, IFAD's programmes will provide inputs to smallholders on a matching-grant basis or other suitable modality.
 - (iii) **Building capacity for climate change resilience and natural resource management.** This includes supporting sustainable land and environmental management practices, and conserving natural resources to counteract the impacts of mechanization and the use of agrochemicals.⁹
36. **Strategic objective 3: Strengthen capacities and economic opportunities.** IFAD will support the capacity-building of farmers' organizations and MSMEs, as well as the strengthening of partnerships between smallholders and larger private sector actors in rural Ghana in the following ways:
- (i) **Supporting development of affordable agricultural services.** These activities will complement strategic objective 2 by developing services that provide improved inputs, extension, agro-processing and storage of produce at affordable prices.
 - (ii) **Strengthening the development of entrepreneurial, business and organizational management skills.** These activities will focus on skills development to improve results-based management of MSMEs and farmers' organizations serving rural areas.

⁹ The purpose of these activities is to ensure that beneficiaries exploit natural resources in a sustainable manner through a range of measures, such as forest conservation and sound farming practices to preserve land and water resources, including applying the right quantities of agrochemicals and introducing conservation agriculture.

- (iii) **Improving access to financial services.** Given the predominance of MSMEs in the private sector, developing an inclusive financial sector that offers de-risking products and services is vital to their growth. IFAD will finance technical assistance and other related interventions.
37. The COSOP's theory of change is centered on strengthening the productivity of value chains through the following:
- (i) Mobilizing greater resources for pro-poor investments in agricultural value chains through cofinancing for projects will create an enabling environment for private investments and improve public investments in agriculture. This will increase investments in targeted value chains for the benefit of smallholders.
 - (ii) Increasing access to innovations, technology and strategies for natural resource management and climate change resilience and adaptation will increase the incomes of smallholder farmers.
 - (iii) Enhancing the provision of affordable services for smallholders through skills development, improving links to banks for farmers' organizations and MSMEs, as well as building partnerships with larger private sector actors will increase the profitability of MSMEs and farmers' organizations, leading to increased incomes for smallholders.
38. **The IFAD11 mainstreaming themes will be addressed as follows:**
- (i) Climate change measures will be embedded into all project designs. In addition, the planned Livestock and Pastoral Systems Development Project will be aimed at climate change adaptation and a reduction of emissions from livestock production.
 - (ii) Women and youth will comprise 50 per cent of COSOP beneficiaries. Gender and youth mainstreaming action plans will be developed for each project during the design phase. GASIP will leverage the Gender Action Learning System and a partnership with LEAP will facilitate the inclusion of youth and women.
 - (iii) Through its investments, this COSOP will provide tailored services to women farmers who are disadvantaged in terms of access to land, markets, credit and extension services.
 - (iv) Nutrition will be mainstreamed by selecting nutrition-sensitive crops for value chain development. This will improve beneficiaries' access to diversified, safe and nutritious foods, and important micronutrients.

D. Menu of IFAD interventions

39. **Loans and grants.** Strategic objective 3 will be achieved by all COSOP activities. Strategic objective 2 will be achieved through GASIP and other proposed value chain development interventions. Strategic objective 3 will be achieved through REP and the new initiative on rural finance, some components of GASIP and activities included in other new projects. See Table 1 below for more details on the projects to be implemented during the COSOP period.
40. There is also potential for a regional value chain initiative on cashew and possibly other cash crops in support of Planting for Export and Rural Development, a flagship programme aimed at promoting the production of export-oriented crops and improving rural livelihoods. The potential cashew initiative would be regional and would aim to foster a partnership with the International Finance Corporation.

41. In line with IFAD's Private Sector Engagement Strategy and in support of Ghana's transition to middle-income status, the newly capitalized Agribusiness Capital (ABC) Fund is a potential source of financing for MSMEs that would support the achievement of strategic objective 3.
42. **Country-level policy engagement (CLPE).** In support of strategic objective 2, policy discussions will focus on creating an enabling environment for investment in agriculture, including access to land. IFAD will draw on the expertise of the International Land Coalition to inform and enhance policy dialogue. Other areas of policy work may include financial policies to enhance smallholders' access to financial services and formalize MSMEs, strengthening their role along different value chains. IFAD's involvement in policy dialogue will be strengthened through its role as co-chair of the Agriculture Sector Working Group.
43. **Capacity-building.** IFAD's interventions will strengthen the Government's capacity for monitoring and evaluation (M&E) by piloting the Advancing Knowledge for Agricultural Impact (AVANTI) and programme delivery unit (PDU) initiatives. Activities related to AVANTI will include an assessment of the Ministry of Food and Agriculture's monitoring and oversight capacity. The COSOP will also strengthen Ghana's capacity to manage for results – consolidating gains achieved in the ongoing programme. Additional financing approved in December 2017 will support NBSSI in providing business services to MSMEs.
44. **Knowledge management.** IFAD-financed projects will include plans for compiling and distributing knowledge from both the projects and related activities. Priority areas will include post-harvest losses, nutrition and climate change resilience, and country-level policy engagement (see paragraph 42).
45. **South-South and Triangular Cooperation (SSTC).** SSTC will focus on the exchange of knowledge on smallholder agriculture and rural development with neighbouring countries, including innovative and tested solutions for developing agricultural value chains (see appendix VII).
46. **Communication and visibility.** The COSOP's communications strategy will focus on building the capacity of farmers' organizations, private sector partnerships and the impacts of value chain projects and rural finance. Visibility will be enhanced through social media, exchange visits and policy forums. Communications products will also include project documents, case studies and events.

V. Innovations and scaling up for sustainable results

47. **Innovations.** IFAD-financed programmes have facilitated a number of innovations, including: a cashless credit system; district value chain committees and facilitating agents; digital value chain financing and mobile money transfer by telecommunications companies; good practice centres; market information systems; and mechanical cassava harvesters. In its new projects, IFAD will continue supporting digital technology and will work with regional and national centres of excellence to generate innovations and support their dissemination among beneficiaries. It will also work with financial institutions to develop innovative products that encourage banks to lend to smallholders.
48. **Scaling up.** IFAD will focus on scaling up support to MSMEs through REP and planned value chain interventions such as the smallholder-based Cocoa Value Chain Project and the Cashew Value Chain Project. It will also work to scale up innovative financial products through the proposed AAFORD project. The COSOP will continue to mainstream the issues of gender equality, youth empowerment (in collaboration with the Government's Youth in Agriculture Programme), climate-smart agriculture and nutrition-sensitive agriculture through IFAD's leadership in the Agriculture Sector Working Groups and other initiatives.

VI. COSOP implementation

A. Financial envelope and cofinancing targets

49. This COSOP will cover two performance-based allocation system cycles. The 2019-2021 allocation for Ghana in the Eleventh Replenishment of IFAD's Resources (IFAD11) is US\$46 million and a similar amount is assumed for IFAD12 (2022-2024). In IFAD11, Ghana will be transitioning its borrowing terms from highly concessional to blend terms. The COSOP is expected to exceed IFAD's cofinancing targets given the strong interest of the Government and international donors in cofinancing IFAD-supported projects (see table 1 below).
50. GASIP and REP will be closing in 2021 and 2022 respectively, and just two new projects are expected to be financed in IFAD11. During IFAD12, one new project is expected, which means that no more than three projects will be implemented at any one time.

Table 1
IFAD financing and cofinancing of ongoing and planned projects
 (Millions of United States dollars)

Project	IFAD financing	Cofinancing		Cofinancing ratio
		Domestic	International	
Ongoing				
Rural Enterprises Programme (REP)	71.5	108.0	76.5	1:2.58
Ghana Agricultural Sector Investment Programme (GASIP)	46.6	31.4	-	1:0.67
Planned				
Affordable Agricultural Financing for Resilient Rural Development Project (AAFORD)	7.0 (IFAD11)	14.2	55.1	1:9.90
Smallholder-based Cocoa Value Chain Project	38.0 (IFAD11)	25.0	150.0 (African Development Bank)	1:4.61
Cashew Value Chain Project (Regional)	1.0 (IFAD11)			
Livestock and Pastoral Systems Development Project	46.0 (IFAD12)	30.0	50.0 (Green Climate Fund)	1:1.74
Total	210.1	208.6	331.6	1:2.57

B. Resources for non-lending activities

51. The estimated cost of non-lending activities is US\$5 million. Activities will include:
- (i) Ongoing engagement in policy dialogue through sector-wide donor coordination platforms, meetings of the United Nations country team and other forums;
 - (ii) Innovation, technology transfer and knowledge-sharing through SSTC;
 - (iii) Activities to support implementation (e.g. AVANTI, PDU); and
 - (iv) Communication activities.

C. Key strategic partnerships and development coordination

52. Donor coordination in Ghana comprises heads of agencies, heads of cooperation, multi-donor budget support and sector working groups. Donor dialogue at the

sector working group level is jointly led by development partners and the Government. IFAD will work with a number of partners to support the COSOP including:¹⁰

- (i) Public institutions, especially the Ministry of Food and Agriculture; Ministry of Trade and Industry; Ministry of Finance; Ministry of Environment, Science, Technology and Innovation; NBSSI; Ghana Cocoa Board; Ministry of Local Government and Rural Development; and local and regional authorities;
 - (ii) Private sector organizations such as farmers' organizations, MSMEs, apex organizations representing farmers and MSMEs, and apex bodies representing financial institutions;
 - (iii) Development partners for coordination of activities, international cofinancing and policy dialogue, particularly the African Development Bank and World Bank;
 - (iv) The United Nations country team, which supports the United Nations Sustainable Development Partnership 2018-2022; and
 - (v) The other Rome-based agencies working in complementary areas as described in appendix XII through their offices based in Ghana; these partnerships will be formalized in memoranda of understanding.
53. IFAD will also work with development partners, United Nations agencies, government institutions, the Green Climate Fund and other partners on policy dialogue around green financing.

D. Beneficiary engagement and transparency

54. **Beneficiary engagement** will comprise: (i) stakeholder consultation plans to engage beneficiaries systematically; (ii) annual outcome surveys to improve project implementation and allow for corrections; and (iii) the potential use of a third party to objectively evaluate results (see appendix VI).
55. **Transparency.** With respect to transparency, this COSOP will include the public disclosure of external auditor reports and supervision reports, as well as the publication of resources and results related to COSOP implementation.

E. Programme management arrangements

56. The IFAD Country Director will manage the COSOP from the country office in Ghana with support from technical staff located in IFAD's Coastal Hub in Abidjan. IFAD and the Government intend to increase the frequency of portfolio stocktaking exercises and the Government will conduct annual ministerial-level reviews of the portfolio.
57. The establishment of a PDU will assist the Ministry of Food and Agriculture in efforts to follow up on COSOP implementation. IFAD is providing support to establish a new PDU and build staff capacity through a grant to Delivery Associates.
58. Intensive efforts are being made to improve the performance of GASIP through restructuring and greater implementation support, bolstered by a renewed government commitment. More details can be found in appendix XIII.

F. Monitoring and evaluation

59. Implementation will be monitored using: (i) IFAD's Operational Results Management System; (ii) supervision and implementation support missions; and (iii) annual outcome surveys. The Government and IFAD will conduct a joint COSOP

¹⁰ See appendix VI for additional information.

mid-term review in 2021 to assess the programme’s relevance, effectiveness and efficiency, and make any necessary adjustments.

60. IFAD will strengthen results-based management and M&E in Ghana through the AVANTI initiative, which supports the implementation of government programmes. The Programme in Rural M&E initiative will also continue with certification of M&E professionals in IFAD-funded projects.
61. Care will be taken to ensure that these resources are not used to fund child labour – even inadvertently – or to support any form of bonded labour or slavery. IFAD will incorporate information on these issues in all design documents, project operations manuals, annual workplans and budgets, mid-term reviews, project completion reports and evaluations with a view to addressing any issues inconsistent with international conventions.

VII. Risk management

62. Table 2 below presents the most likely risks to achieving the COSOP’s objectives and IFAD’s mitigation measures.

Table 2

Risks and mitigation measures

<i>Risks</i>	<i>Risk rating</i>	<i>Mitigation measures</i>
Political/governance	Low	The Government is stable with peaceful changes of leadership.
Macroeconomic instability	Medium	The Government can promote economic stability through cost-effective import substitution.
Weak sector strategies and policies	Medium	COSOP activities will support rural development policy formulation, contribute to policy dialogue and strengthen farmers' organizations.
Inadequate institutional capacity	Medium	The COSOP will provide training for government and projects staff, and farmers' organizations.
Portfolio problems	Medium	GASIP is classified as a “problem project”. A new team has been recruited and there has been stronger follow-up by the Ministry of Food and Agriculture, with oversight by IFAD.
Poor financial management	Medium	IFAD’s Financial Management Services Division will take a proactive approach to ensure that IFAD’s fiduciary requirements are met.
Procurement problems	Substantial	Supervision missions will include reviews of projects’ procurement performance and the procurement risk matrix at least once per year in line with IFAD’s procurement guidelines.
Environment and climate	Medium	IFAD will mainstream resilience building into all project activities and encourage the Government to support climate-smart practices.
Social inequities	Medium	COSOP activities will create remunerative agriculture-based and other rural employment opportunities for youth, and address gender inequality in rural communities.
Other: Slow disbursement	Medium	IFAD will work with the Government to facilitate disbursement (e.g. for GASIP).
Overall	Medium	

COSOP results management framework

Country strategy alignment <i>What is the country seeking to achieve?</i>	Related SDG ¹¹ UNSDP Ghana ¹² Outcome	Key results for COSOP <i>How is IFAD going to contribute?</i>			
The Medium-Term National Development Policy Framework (MNDPF 2018-2021) Overall Vision To create an optimistic, self-confident and prosperous nation, through the creative exploitation of our human and natural resources, and operating within a democratic, open and fair society in which mutual trust and economic opportunities exist for all.	SDG1, SDG 2 UNSDP OC 1 UNSDP OC 2 And linked to UNSDP OC 5 UNSDP OC 6	Strategic objectives <i>What will be different at the end of the COSOP period?</i>	Lending and non-lending activities* for the COSOP period	Outcome indicators** <i>How will the changes be measured?</i>	Milestone indicators <i>How will progress be tracked during COSOP implementation?</i>
Main Goals: <ul style="list-style-type: none"> • Create opportunities for all Ghanaians • Safeguard the natural environment and ensure a resilient built environment 	SDG 17	Strategic Objective 1: Promote a financially sustainable and inclusive rural transformation by (i) fostering a strong enabling environment, (ii) improving the quality and effectiveness of public expenditure in agriculture, and (iii) acting as an assembler of development finance.	Lending/investment activities <ul style="list-style-type: none"> • On-going: GASIP, REP • New: SBCVCP, LSDP, CVCP, AAFORD Non-lending/non-project activities <ul style="list-style-type: none"> • CLPE • Policy dialogue 	Increase in agriculture expenditure in Ghana (At least by 2%)	US\$ 150 million domestic third party resources mobilized through IFAD projects (including from the financial institutions, agribusinesses, CSR, government and foundations in Ghana) US\$ 250 million international financing mobilized through IFAD projects.
	Overall Goal This COSOP seeks to contribute to the achievement of SDGs 1, 2, 9, 12 and 14 and to promote inclusive and sustainable rural transformation in Ghana by investing in activities that will enable poor rural people to increase their incomes through remunerative, and resilient livelihoods.		350,000 people benefit from upward economic mobility (At least 50% women and 50% youth reached Contribute to reduction in percentage of stunted children below 5 years by 5% (baseline 18% ¹³)	450,000 beneficiaries have been reached through different interventions. (at least 50% of women and 50% youth in the age range between 15-34 years old) <i>(Verification mean: project progress reports)</i>	

¹¹ SDG 1: No Poverty, SDG 2: Zero Hunger, SDG5: Gender Equality, SDG9: Industry, Innovation and Infrastructure, SDG 10: Reduced Inequalities, SDG12: Responsible Consumption and Production, SDG 13: Climate Action, SDG 14: Life Below Water and SDG 17: Partnership for the Goals.

¹² Outcome 5: Environmental governance at national and local levels is effective, efficient and coherent

Outcome 6: Urban & rural community resilience is increased due to access to affordable services, knowledge and tools.

¹³ Multiple Indicator Cluster Surveys, UNICEF, 2017/2018.

Country strategy alignment <i>What is the country seeking to achieve?</i>	Related SDG¹¹ UNSDP Ghana¹² Outcome	Key results for COSOP <i>How is IFAD going to contribute?</i>			
<ul style="list-style-type: none"> Maintain a stable, united and safe society; and Build a prosperous society. 			<ul style="list-style-type: none"> Partnerships SSTC Knowledge management 		# of policy discussions regarding increase of public budget expenditures in agriculture (5-10 meetings at different levels)
	SDG1, SDG2, SDG9, SDG12 SDG14 UNSDP Outcome 2: Productive agriculture drives sustainable industrialization, improves livelihoods and ensures a hunger- and malnutrition-free nation Linked to UNSDP Outcome 5 and Outcome 6 SDG 13, SDG 17 Mainstreamed: SDG 5, SDG 10	Strategic Objective 2: Strengthen productivity in inclusive value chain development by enabling smallholder farmers, livestock keepers and fishers to a) improve access to technology and innovation, b) enhance access to improved production inputs and produce markets by supporting the use of certified seeds and agro-chemicals; and, c) build capacity of climate change resilience and natural resource management.	Lending/investment activities <ul style="list-style-type: none"> On-going: GASIP New: SBVCP, LVSDP, CVCP Non-lending/non-project activities <ul style="list-style-type: none"> CLPE Partnerships SSTC: Knowledge management 	# smallholders with improved access to better agricultural technologies and innovations (250,000 smallholders, who are members of FBOs, MSMEs or individuals, have access to technologies and innovations) # of smallholders, FBOs and MSMEs with improved knowledge of natural resource management, and relevant environment and climate change adaptation practices to improve resilience	# smallholder farmers that receive capacity building on improved production and post-harvest technologies 50% women, youth, those who are at risk of falling to extreme poverty, etc. (350,000 smallholders) <i>(Verification mean: project progress reports)</i> # of farmers, FBOs and MSMEs that have access to matching grants, seeds and agro-chemicals (10,00 FBOs; 20,000 MSMEs) <i>(Verification mean: project progress reports)</i> # of farmers, FBOs and MSMEs that receive training on environment and climate sensitive practices and technologies (3,500 FBOs; 20,000 MSMEs; 50,000 Individual smallholders) <i>Verification mean: project progress reports)</i>

Country strategy alignment <i>What is the country seeking to achieve?</i>	Related SDG¹¹ UNSDP Ghana¹² Outcome	Key results for COSOP <i>How is IFAD going to contribute?</i>			
				(2,500 FBOs; 15,000 MSMEs; 30,000 individual smallholders) # of smallholders with increased income (350,000 smallholders) # of households with access to diversified and nutritious foods. (50,000 households of 5 people on average)	# of households to have received information regarding diversified and nutritious foods (75,000 households of 5 people on average) <i>(Verification mean: project progress reports)</i> # of smallholders, FBOs and MSMEs that have better natural resource management practices (3,500 FBOs; 20,000 MSMEs; 50,000 individual smallholders)
	SDG 1, SDG8, SDG 9 UNSDP Outcome 3 Competitive private sector generates decent jobs that increase opportunities for more inclusive economic growth Linked to UNSDP Outcome 5 and Outcome 6 SDG 13, SDG 17 Mainstreamed:	Strategic Objective 3. Strengthen capacities and economic opportunities of FBOs and MSMEs and partnerships with private sector by a) supporting development of affordable, yet sustainable agricultural service provisions; b) strengthening development of entrepreneurial, business and organizational management skills and c) improving access to financial services.	Lending/investment activities <ul style="list-style-type: none"> • Ongoing: REP, GASIP • New programmes: AAFORD, SBVCP, LVSDP, CVCP Non-lending/non-project activities <ul style="list-style-type: none"> • CLPE • Partnerships • SSTC • Knowledge management 	# of smallholders, FBOs and MSMEs that adopt effective organizational approaches to access agricultural inputs and markets (2,500 FBOs; 15,000 MSMEs; 30,000 individual smallholders) # of FBOs, MSMEs and individual smallholders with improved access to appropriate and sustainable services (financial, extension etc.).	# of farmers, FBOs and MSMEs that receive training on organizational approaches (3,500 FBOs; 20,000 MSMEs; 50,000 individual smallholders) <i>(Verification mean: project progress reports)</i> # of smallholders, who receive financial services training (20,000 individual smallholders) <i>(Verification mean: project progress reports)</i>

Country strategy alignment <i>What is the country seeking to achieve?</i>	Related SDG¹¹ UNSDP Ghana¹² Outcome	Key results for COSOP <i>How is IFAD going to contribute?</i>			
	SDG 5, SDG 10			(2,500 FBOs; 15,000 MSMEs; 30,000 individual smallholders) # of profitable MSMEs created (20,000 MSMEs) # of sustainable employment opportunities generated (50,000 employment opportunities) # of Youth (by gender) that have strengthened entrepreneurial skills and capacities to build viable and inclusive MSMEs (80,000 Youth) # of smallholders, FBOs and MSMEs that have	# of MSMEs created (20,000 MSMEs) # of smallholders who are linked to participating financial institutions (60,000 individual smallholders) <i>(Verification mean: project progress reports)</i> # of agricultural finance and agricultural insurance products developed (20 products) <i>(Verification mean: project progress reports)</i> # of employment opportunities created - by gender (75,000 employment opportunities) <i>(Verification mean: project progress reports)</i> # of youth entrepreneurs trained (50,000 youth entrepreneurs) <i>(Verification mean: project progress reports)</i>

Country strategy alignment <i>What is the country seeking to achieve?</i>	Related SDG¹¹ UNSDP Ghana¹² Outcome	Key results for COSOP <i>How is IFAD going to contribute?</i>			
				better natural resource management practices (2,500 FBOs; 50,000 MSMEs; 30,000 individual smallholders)	

Transition scenarios

1. Ghana's economic performance has improved significantly since 2015 when real GDP growth fell to 2.2 per cent. Real GDP growth was 8.1 per cent in 2017 and, after a modest deceleration in 2018, is expected to rise to 8.8 per cent in 2019, the highest rate in the world. Under the "Food for Jobs and Growth" program, agricultural production has likewise improved, with the sector witnessing 8.4 per cent growth in 2017. The primary fiscal balance would have been in surplus in 2018 but for large one-off costs associated with a financial sector clean-up. Headline inflation, which topped out at over 19 per cent (year/year basis) in early 2016 has declined to roughly 9 per cent.
2. Due primarily to currency depreciation, in US dollar terms the GDP per capita actually declined from US\$2,390 in 2013 to US\$1,734 in 2015 before climbing back to US\$2,206 in 2018. While economic performance has improved, the country still faces many challenges in its ambition to transition to an upper middle income country. Government revenues are well below target, constraining the ability to invest in productivity improving infrastructure without significantly elevating the risk of debt distress. The most recent International Monetary Fund (IMF)/World Bank Debt Sustainability Analysis in March 2019 continued to assess Ghana as being at a high risk of debt distress as it exceeds certain prudential thresholds under various stress tests. However, it remains under the 65 per cent of GDP threshold that is included in the newly enacted Fiscal Responsibility Law.

Table 1: Projections for key macro-economic and demographic variables¹⁴

Case	Base	High	Low
Average Real GDP growth (2019-2024)	5.4	8.5	4.0
GDP/capita (2024) ppp 2011 (US\$)	6 900	8 000	6 450
Gross government debt (% of GDP) (2024)	52.0	50.0	75.0
Debt service ratio (2024)	17.0	13.0	30.0
Inflation rate (%) (2019-2024)	7.3	9.0	15.0
Rural population	2018: 12,951,000		
	2024: 13,483,000		
	Annual growth rate: 0.7%		
Investment Climate for rural business	Rating: 4/6 In November 2017, the Government unveiled an Integrated Plan for Agriculture Development, which has been dubbed the "National Agricultural Investment Plan" for the agriculture and food sector. This has been supplemented by three major agricultural-related programmes--"Planting for food and jobs" (PFJ), "One-village one-dam", and "One-district one-factory (1D1F)"--that the current Government has unveiled since coming into office. Ghana has the highest Doing Business ranking of any country in West and Central Africa but it still ranks 113 of 190 countries which indicates there is considerable scope for improvement.		

¹⁴ The projections are the author's estimates based on the IMF World Economic Outlook (April 2019) and the World Development Indicators.

Vulnerability to shocks	<p>Rating: 3/6</p> <p>As a significant oil exporter, Ghana is vulnerable to oil price shocks. Also, given its high risk of debt distress, a sharp tightening of global financial conditions would cause higher debt service and refinancing risks. With respect to climate shocks, it is the 68th most vulnerable country in the world and the 81st least ready country according to the Notre Dame Global Adaptation Initiative (ND-GAIN) analysis.</p>
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3. We consider three possible trajectories for the 2019-2024 period:
4. **Base case:** The base case reflects the projections in the most recent IMF World Economic Outlook. GDP growth (real) is projected to be 8.8 per cent in 2019 and to decelerate to an average of 4.9 per cent over the remaining five years of the COSOP period. Under this scenario, the government continues to implement prudent macro policies and the external environment remains favourable. The budget deficit remains under the five per cent of GDP cap in the law, as does the debt cap of 65 per cent of GDP. The country remains in the lower middle-income category.
5. **High case:** Under the high case, recent oil discoveries result in a doubling of oil production by 2021 and the government's improved debt management practices prevent a repeat of the undisciplined borrowing program that led to fiscal constraints and concerns over debt distress earlier in the decade. Foreign investment rapidly increases across a broad range of economic sectors and the external environment improves beyond the base case assumption, resulting in an improvement in Ghana's terms of trade. In this case, a sustained 8.0-9.0 per cent of GDP growth rate would occur.
6. **Low case:** In the low case, Ghana is hit by a number of shocks. Most significantly, there is a sustained decline in oil prices due to weak global growth. Moreover, the 2020 election year results in a return to undisciplined fiscal and monetary practices, discouraging foreign investors and causing significant declines in the value of the currency. This, in turn, results in higher inflation and increased doubts by foreign investors in the long-term economic prospects for Ghana.

Implications for IFAD's country programme

7. **Lending terms and conditions**
 - Ghana is a lower middle income country that is transitioning to be provided by loans on blend terms in accordance with the Policies and Criteria for IFAD Financing. Even under a high case scenario, it is highly unlikely to transition to less concessional terms prior to 2025. Nor is it likely to transition to more concessional terms, even under the low case.
8. **IFAD Performance-Based Allocation System (PBAS) allocation**
 - Ghana has historically been one of the stronger performers in the WCA region. The PBAS allocation is unlikely to vary much under a high or low case.
9. **COSOP Priorities and Products**
 - The strategy with IFAD in the past has been to focus the portfolio on two or three bigger programmes. The number of IFAD-financed programmes is currently two, namely, the Ghana Agriculture Sector Investment Programme (GASIP), under Ministry of Food and Agriculture (MoFA) and the Rural Enterprises Programme (REP) under the Ministry of Trade and Industry (MoTI). However, given the current shape of the portfolio and based on the need across the sector, the number of the projects and programmes is likely to increase. Under the low case, the Government may not have sufficient resources to implement planned capital investments, which would likely to have a negative spill over effect on the COSOP.

10. Co-financing opportunities and partnerships

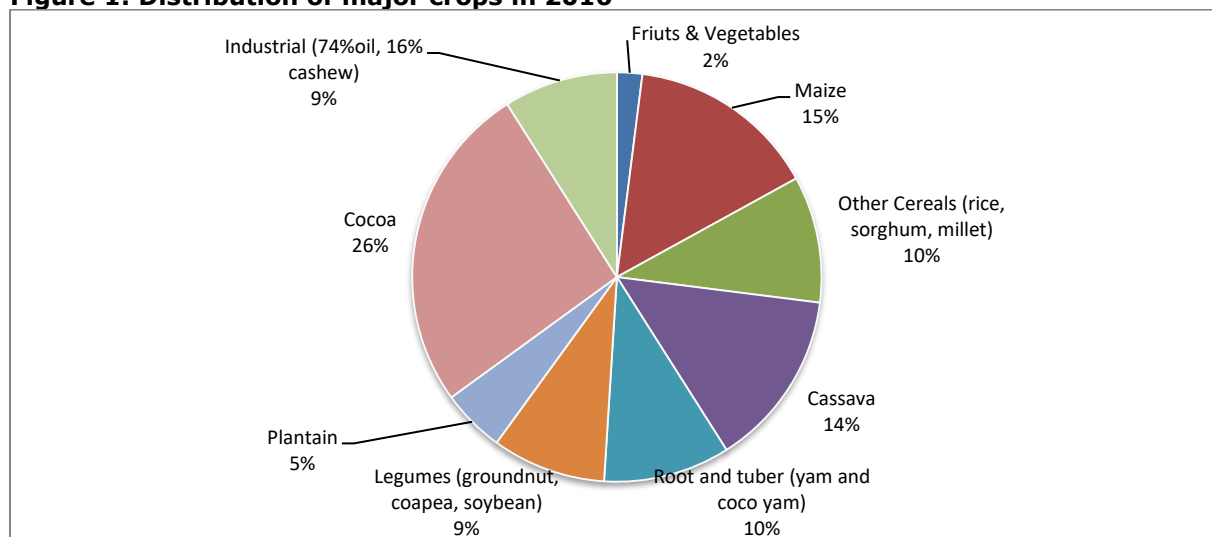
- Domestic co-financing and partnership opportunities should increase under the high scenario due to higher government revenues. Conversely, the low case would constrain co-financing opportunities, both domestically and internationally but would heighten the importance of partnership with other actors in the rural transformation space.

Agricultural and rural sector issues

Description of the agricultural and rural sectors

1. In Ghana 55% of the population and 49% of the households live in rural areas.¹⁵ In 2010, over 75 per cent of households directly or indirectly depended on agriculture and forestry¹⁶. The agriculture sector remains the primary employer for 40 per cent of the population, especially for the 55 per cent of the population living in rural areas¹⁷ and for the poorest. Poverty is 3.7 times higher in rural areas where approximately 75 per cent of households depended on agriculture in 2016¹⁸. In 2017, Ghana recorded 8.4% agricultural growth¹⁹.
2. The Ghana Agricultural Investment Plan (GhAIP) categorises the agriculture sector into 5 sub-sectors, namely; crops, forestry, cocoa, livestock and fisheries²⁰. Agricultural GDP represents 18.9 per cent of total GDP and relies on crops for 67.7 per cent, forestry for 11.2 per cent, cocoa for 8.8 per cent, livestock for 6.2 per cent and fisheries for 6.1 per cent with recent 13 per cent increase in production in 2017²¹.
3. The crop sub-sector consists of 5 categories; namely, roots and tubers, cereals, legumes, fruits and vegetables and tree/industrial crops. After cocoa, roots and tubers (yam and cassava) are the major crops produced in Ghana followed by cereals (maize) as shown in the Figure 1.

Figure 1: Distribution of major crops in 2016²²



Source: MoFA Progress Report 2017, Facts and Figures 2016

4. About 47% of farming households are engaged in livestock and animal²³ production which play key roles for nutrition, income, savings and resilience²⁴. Five per cent of

¹⁵ MoFA Facts and Figures 2016.

¹⁶ World Bank, 2017. Agricultural Sector Note.

¹⁷ World Bank, 2017. Gender Database. This provides access to 2015 data from The United Nations Population Division World Urbanization Prospects on the rural population and the 2017 ILO dataset on employment.

¹⁸ Data on households engaged in agriculture and in rural areas come from MoFA, 2017, Facts & Figures 2016.

¹⁹ MoFA, 2017. Sector Report.

²⁰ MoFA, 2017. Ghana Agriculture Investment Plan.

²¹ MoFA, 2017. Progress Report.

²² In % of Total Production of 8,647,000 ha.

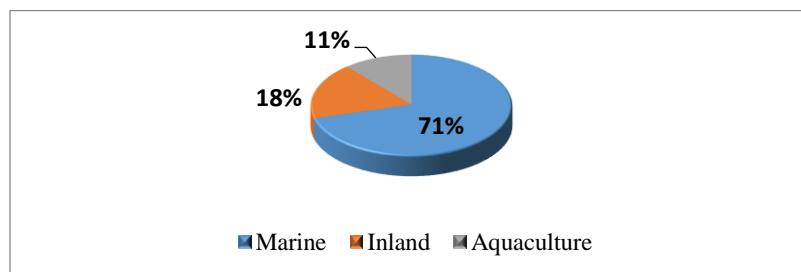
²³ Total domestic meat production increased by 24% from the baseline of average taken form 2011/2013 to 2016. In 2017, Poultry was 37% of the total domestic livestock production followed by pigs, goats, cattle and sheep (in the order of the production volume).

²⁴ MoFA progress report 2017.

livestock keepers in rural areas operate small scale enterprises on a commercial basis²⁵.

5. Among the five key agricultural sub-sectors, fisheries recorded the second highest economic growth of 11.7 per cent in 2017. About 71 per cent of total fish production originates from marine sources, 18 per cent are from inland waters, whereas 11 per cent is from aquaculture in Ghana (Figure 2)²⁶. The majority of captured fish from marine fisheries is through artisanal fishing (64 per cent)²⁷. Fish production does not meet the national demand for fish.²⁸ However, 11 per cent of the fish and fisheries products produced in Ghana were exported, a key source of foreign exchange in 2017²⁹.

Figure 2: Percentage of Fish Production by Sources, 2017



Source: MOFAD, 2017

6. In 2017, Ghana exported US\$ 17.1 billion and imported US\$ 13.2 billion, resulting in a positive trade balance of US\$ 3.9 billion³⁰. The top export destinations for Ghana's products are India, China, Switzerland, South Africa and the Netherlands³¹. The principal agricultural exports are cocoa, timber and horticultural products and fish³². Cocoa in particular suffered from the volatility of commodity prices. Wheat, Rice, Chicken (frozen), milk, and fish constitute major imports that already exceed food exports with significant, but mixed, potential for import substitution³³. The most important origins for imported products are China, the United States, India, Belgium, Luxembourg, and the United Kingdom³⁴.

Key production constraints

7. In spite of steady growth, agriculture in Ghana remains largely rain-fed, manual and subsistence-oriented. Some 85 per cent of farmers can be considered to be smallholders with less than 10 ha³⁵ of land. In 2012, average farm size was 2.4 ha³⁶. Large farms and plantations over 100 ha represent 0.1 per cent of farms and 3 per cent of farm land³⁷. Crop yields are recorded to be around 20 per cent – 60 per cent below their maximum achievable yields, except for cocoa and specific intensive irrigated rice. Farmers tend to intensify and increase production through labor-saving technologies (mechanization services and herbicides), area expansion³⁸ and

²⁵ FAO 2004.

²⁶ MoFA progress report 2017.

²⁷ MoFA progress report 2017.

²⁸ MoFA progress report 2017.

²⁹ MoFA progress report 2017.

³⁰ Observatory of Economic Complexity <https://atlas.media.mit.edu/en/profile/country/gha/>.

³¹ Observatory of Economic Complexity <https://atlas.media.mit.edu/en/profile/country/gha/>.

³² IFPRI, 2018, post-harvest losses in Ghana.

³³ IFPRI, 2018, post-harvest losses in Ghana.

³⁴ Observatory of Economic Complexity <https://atlas.media.mit.edu/en/profile/country/gha/>.

³⁵ Ghana Living Standard Survey 6.

³⁶ Ghana Living Standard Survey 6.

³⁷ Ghana Living Standard Survey 6.

³⁸ Houssou, N., Johnson, M., Kolavalli, S. et al. *Agric Hum Values* (2018) 35: 41. <https://doi.org/10.1007/s10460-017-9788-6>.

adaptation of their crop mix towards changing market opportunities and rainfall patterns.

8. Paths to improve productivity and intensify production differ according to context (agro-ecology, market access, family labor vs land scarcity etc.) and farmer's specific constraints and assets (land, labor, cash, skills etc.). However, nine common constraints to improving productivity can be identified³⁹:
- **Insufficient use of improved planting materials & research** to meet new constraints (including shorter and more resilient varieties) and market demand.
 - **Land degradation and soil nutrient depletion.** Ghana has high rates of soil nutrient depletion in sub-Saharan Africa, while having the lowest rates of annual inorganic fertilizer application⁴⁰. In 2013, 30.8% of households use inorganic fertilizer, 12% organic fertilizer and 1.8% use both. On the other hand, 65.7% use chemicals⁴¹.
 - **Only 0.4% of the agricultural area is under formal irrigation** and 3 per cent under informal private small scale irrigation⁴². Farmers depend on erratic rainfall, resulting in low and uncertain yields and incomes. Access to irrigation is particularly poor in the north, where 80% of households are engaged in agriculture and depend on only one uncertain rainy season. This has an important impact on poverty rates and generates seasonal food security⁴³. Increased rainfall variability, coupled with shorter rainy seasons and increased numbers of disasters (drought and flood) are increasing risks and the needs for resilient farms⁴⁴. Lowland water management systems and recession agricultural systems could be developed at lower cost but this would require addressing issues related to land tenure and property rights regimes.
 - **Labour constraints and access to mechanization.** The Agricultural Mechanisation Service Centres (AMSEC) programme was launched in 2007 to improve farmer's access to tractors, reaching 1 tractor for 1,500 farmers in 2015. However, the high maintenance costs and insufficient use of these centres translate into high costs for farmers and weak sustainability of the initiative. Mechanization services for harvest and post-harvest are limited.
 - **Post-harvest losses (PHL) are important.** These are particularly high for fruit and vegetables (e.g. 37% for tomatoes; 45% mango), but also for cereals (15% for maize) and starch (21% for cassava). Causes include poor farm-level practices, poor transport and handling, and inadequate storage exposing products to pests and diseases.
 - **Poor rural infrastructure.** Poor road conditions and the small volumes of products imply high transport costs. Limited access to drinking water and insufficient access to energy further reduce the time women have for productive activities.
 - Smallholders also suffer from **limited access to rural finance⁴⁵ and rural advisory services** (there was only one public extension officer per 1,885 farmers

³⁹ CPESDP with further inputs from IFPRI research on agricultural intensification, including GSSP policy note 10.

⁴⁰ MoFA, 2017, Facts and Figures 2016.

⁴¹ Ghana LSMS data 2012-2013.

⁴² MoFA, 2017, Facts and Figures 2016.

⁴³ WFP, 2012.

⁴⁴ FAO CPP, 2013.

⁴⁵ Index database 2017.

in 2017). Producer organizations have limited capacities to facilitate access to such services and inputs by farmers.

- **Limited tenure** security impedes longer term investments in land and water (e.g. bunds and terrace development, conservation agriculture, agro-forestry etc.). In some areas there are incidents of competition and sometimes **conflict between farmers and herders** around the use of land for crop cultivation and/or livestock production. Where conflict and competition over access to natural resources (land and water, for example), past development programme experience in West Africa suggests that programme results and impact can be improved where formal and less formal conflict resolution mechanisms exist to respond to issues that arise at project level. One example is the ZAGROPs (Zones d'action agro-pastoral) established in the 1990s in e.g. Chad and Central African Republic to ensure multi-stakeholder involvement of resource users in the management of agro-pastoral zones. To determine the most appropriate activity or mechanism to address this in a specific project context, country diagnostic studies may be required and actions designed in consideration of existing national and local Government mechanisms and bodies, such as the Land Commission or District Assemblies.
- **Pest and disease management** is also a major challenge, with the fall army worm invasion in 2017⁴⁶.

Market constraints

9. To further increase value-addition, **farmers need to have access to stable and profitable markets**⁴⁷. In 2015, food imports accounted for 16.8% of total merchandise imports and is projected to increase fourfold over the next 20 years⁴⁸. Ghana is experiencing a marked dietary shift with a rapidly **growing demand for processed food** and for quality and certified 'safe food'⁴⁹. Yet, only 20% of this demand was met locally in 2016.
10. Major constraints include⁵⁰:
 - low productivity and the high cost of domestic production (e.g. poultry cost is 40% higher than in the European Union);
 - insufficient and irregular domestic production/processing capacities (e.g. only 40% of rice milling capacities are met);
 - poor quality and scarcity of preferred varieties, resulting in domestic products not meeting consumer taste preferences; and
 - high transport costs.
11. Smallholder farmers face specific barriers to access such high value markets, often with weak producer organization capacities and difficulties in implementing contract-based VCs and to ensure the adoption of recognised quality standards.

Regional and continental policy alignment

⁴⁶ MoFA progress report 2017 states that stakeholders mention "fear of "herdsman's menace".

⁴⁷ MoFA sector report 2017 and Even M-A., 2012, Marketing and quality assurance, essential keys to rice production increases in Ghana. CEP analysis 52.

⁴⁸ World Bank Agricultural Sector Note 2017.

⁴⁹ RAGASA C., ANDAM K., AMEWU S., ASANTE S., 2019, Consumer demand and willingness to pay for safe food in Accra, Ghana: Implications for public and private sectors' roles in food safety management. IFPRI Discussion Paper. 43 p.

⁵⁰ ANDAM K., RAGASA C., ASANTE S., AMEWU S., 2019, can local products compete against imports in western Africa. Case from Ghana. IFPRI DISCUSSION PAPER2019PAGES:47.

12. Ghana is fully aligned with continental and regional agricultural policy and investment plans that support the implementation of the Comprehensive African Agricultural Development Programme (CAADP) and Malabo commitments.
13. The Coordinated Programme for Economic and Social Development Policies (CPESDP 2017-2024) recognizes agriculture as the main driving force for rural development. The Medium Term Agriculture Sector Investment I-II-III (2011-2014; 2014-2017-2018-21) focuses on productivity (inputs, extension, integrated crop management etc.), market access and sustainable production. The GhAIP covers agriculture from 2018 to 2021 and seeks to achieve agricultural modernization and industrial transformation of the rural economy for wider national growth. It has seven pillars, namely to: reinforce the public sector; promote a nexus of private sector enterprises to drive agri-food system development; improve the competitiveness of Ghana's agri-food system; promote agriculture financing, access to market and trade, nutrition and social protection; and to enhance land and environment management.
14. Ghana has several flagship programs that target smallholders, including:
 - the **Planting for Food and Job Campaign (PFJ)**, which has supported the subsidized distribution of improved input and demonstrations since 2017 (201,620 smallholders in 2017);
 - the **Modernising Agriculture in Ghana (MAG) programme**, which was launched in 2017 to support access to improved seeds, fertilizer, and delivery of extension services;
 - the fertilizer subsidy programme, which absorbs a large proportion of MoFA's budget and is a flagship programme. Although it has contributed to raising productivity, there is an opportunity to improve its targeting mechanism and better capture the needs of farmers⁵¹;
 - MoFA has also prioritized access to markets and includes actions on post production management, dissemination of market information, standardization (e.g. creation of a green standard in 2017) and the development of exports. MoFA has also developed a seed sector policy to facilitate private sector participation.
15. The Ministry of Finance has developed a new **National Financial Inclusion** and Development Strategy (NFDIS) for the period 2017-2023. The Ministry of Trade and Industry promotes **private sector development**, including through the Rural Enterprises Programme (REP). MoTI announced a 10 point Industrial Transformation Agenda in 2018 and the flagship 'One District One Factory' Initiative. and the government has developed the "Development of small and medium-scale enterprises (SMEs)" initiative to enhance the productive capacities of SMEs and the "Industrial sub-contracting exchange" between SMEs and larger companies. The 'Infrastructure for Poverty Eradication Programme' (IPEP) has allocated US\$ 275 million per year to 275 constituencies to invest in rural and deprived communities.

Institutions, Private sector & smallholder farmer development

16. There is room for improvement in the delivery of public services to smallholder farmers⁵². The MoFA budget mostly covers salaries, operations and input subsidies, leaving little room for infrastructure, irrigation, R&D and extension. **Data collection and analysis is weak and there has been no national census for 32 years.** The Council for Scientific and Industrial Research operates ten food and agriculture research institutes covering specific sectors and regions. However, only 0.7% of budget goes to research, and this is **fragmented among small, externally financed projects with limited stakeholder' involvement.** The **commercial**

⁵¹ IFPRI, 2015, towards a sustainable fertility strategy in Ghana.

⁵² CPESDP and World bank agric sector note 2017.

seed sector is underdeveloped. The provision of **agricultural extension and other services at the local level remains poor** and limits the adoption of innovations. Noting such issues, MoFA has recently made efforts to support extension services and revive the Research-Extension-Farmer Linkages Committee.

17. In 2015, over 90% of agricultural investments were from the private sector including farmers themselves and went into the purchase of inputs and machinery⁵³. Ghana Country Private Sector Diagnostics (CPSD) identifies that the private sector could notably support: (i) agribusinesses in high-value export markets; (ii) the upscaling of financing for promising SMEs in the 'missing middle'; and (iii) the provision of goods and services for smallholders (seeds, fertilizers, storage, transport, machineries, extension etc.).
18. Producer organizations could contribute to the delivery of such services, particularly the 14 apex organizations identified by MoFA⁵⁴. However, the capacities of these organizations remain weak, with dispersed grassroots organizations formed to serve specific projects and with apex farmers' organizations remaining⁵⁵. FBOs engaged in processing and marketing activities accessed loans and additional business activities more successfully⁵⁶. Women's organizations are vibrant⁵⁷. A policy has been developed to support farmer-based organizations and their integration into markets and value chains as well as into rural advisory service and extension programs⁵⁸. Further targeted support is needed as well as more structured involvement of FBOs in governance arrangements and policy issues. So far, the involvement of FBOs in governance and policy remains implicit meanwhile more formal participatory structures, such as the Research-Extension Farmer Linkages Committee, seem to engage individual farmers rather than their organizations.
19. The government seeks to improve **coordination and harmonization among partners**. Platforms exist to achieve this; however, they need to be reinforced, such as Medium-Term Agriculture Sector Investment Plan (METASIP) Steering Committee, Strategic Analysis and Knowledge Support System, Agricultural Sector Working Group, and Joint Sector Review. Additional mechanisms could help engage the private sector and smallholder organizations in a more structured way.

⁵³ MoFA progress report 2017.

⁵⁵ IFPRI, 2011, The renewed case for farmers' cooperatives.

⁵⁶ IFPRI, 2012, Farmer Based Organizations in Ghana.

⁵⁷ Examples include Alliance for African Women Initiative (AFAWI), the Network for Women's Rights in Ghana (NETRIGHT) that advocate to strengthen women right, including access to economic and natural resources and the Ghana Association of Women Entrepreneurs.

⁵⁸ The actions includes (i) the preparation of a Cooperatives Bill and, (ii) partnership with the Ministry of Local Government and Rural Development to enable establishment of FBOs as district corporations.

SECAP background study

1. Climate change, environmental degradation and social exclusion are key challenges for the development of Ghana's agricultural sector and to achieve poverty reduction, food security, nutrition and job creation and income generation particularly for youth and women. Risk-informed public policy and investment in the agriculture sector in the context of climate change, to design a robust country cooperation framework between IFAD and Ghana, requires scientific evidence, environmental, and climate risk profiles and trends, institutional and context analysis. This is necessary to inform optimum future investment and policy reforms to strengthen resilience and well-being of local communities.
2. The main objectives of the SECAP for Ghana are : i) To evaluate scientifically and strategically the impact of current and future trends of climate change and environmental degradation on the performance of Ghana's agricultural development to reduce rural poverty, while building the country's resilience ii) To propose effective and efficient adaptation and mitigation climate change policies and strategic options for the COSOP, and to inform potential policy reforms on national development planning and budgeting processes (national and sector plans; national budget, investments frameworks as well as Nationally Determined Contributions (NDCs)) in agriculture.
3. The SECAP Preparatory Study was prepared following a comprehensive review of national assessment reports and data, national policy and strategy documents and statistical reports on national economy and climate change vulnerabilities in Ghana. Literature reviews and in-country consultations provided evidence on social vulnerability (poverty, rural inequality, gender, youth challenges and nutrition in rural areas) and options to address potential risks.

Situational analysis and main challenges

4. Ghana, which has a land area of 238,535 km², is West Africa's second largest economy after Nigeria and Africa's twelfth largest. The country shares borders with Burkina Faso to the North, Togo to the East, and Côte d'Ivoire to the West, and the Gulf of Guinea lies to the South. The country has continued to consolidate good governance, and its economic growth with the extraction of petroleum and gas in commercial quantities. Ghana attained lower middle-income country status in 2011 and is expected to become the fastest growing economy in Africa in 2019 (IMF). Agriculture in Ghana is predominantly undertaken by smallholder farmers and contributes about 21% of GDP and 12% of tax revenues.
5. The population of Ghana is estimated to be 29.6 million in 2018. The population structure remains young, 39% of population is under 15 years old with the age dependency ratio⁵⁹ of 73%. The fertility rate is 4.2 children per a woman as of 2018⁶⁰. According to the UNDP, the poverty line is only 27.1% of the mean consumption level in 2012/13, while the extreme poverty line is 44.9%. At the national level, official estimates of income poverty show a reduction from between 51% and 56.5% in 1991-92, to 24% in 2012-13.
6. Ghana is endowed with rich mineral resources including gold, diamonds, manganese, limestone, bauxite, iron, salt, clays and granite deposits. Agricultural commodities, such as cocoa have also contributed to economic growth. In 2007, oil was discovered in commercial quantities and since 2010, Ghana has become an exporter of oil and gas. Renewable energy resource opportunities, such as solar, hydro, biomass and wind, are abundant. Ghana's forest resources support diverse

⁵⁹ The age dependency ratio for Ghana is calculated as follows: Age dependency = (people younger than 15 and older than 64) (working age people ages 15-64).

fauna, flora and ecosystems and inland and marine water resources support various biodiversity and tourism industries.

7. Ghana's poverty is increasingly rural, with 38.2% of people in rural areas being poor, compared to 10.4% in urban areas. Inequality has been increasing in the country and poverty remains prevalent in many areas despite positive growth trends. Ghana's balance of trade deficit has widened due to excess of imports over exports. While Ghana succeeded in halving poverty, regional disparities continue to exist with widening inequalities as illustrated in Figures 2 and 3. While Women make up around 50% of the agricultural labour force, and are estimated to produce between 50% and 70% of the food crops, the gap is especially large in rural communities, due to a mix of cultural, economic, and institutional reasons. **Youth unemployment** and joblessness remains a major socio-economic and political problem in **Ghana**, particularly in rural areas.

Social, Environmental and Climate Context

8. Ghana has achieved the *MDG 1: Eradicate Extreme Poverty and Hunger*, but the recent trend in the rate of poverty eradication has been rather slow. It is estimated that 8.2 per cent of Ghana's population was living below the threshold of extreme poverty (GH¢792.05) in 2017. Nonetheless, the incidence of extreme poverty has halved from 16.5 per cent in 2005/06 to 8.4 percent in 2012/13 and stagnated to 8.2 per cent in 2016/17. According to the Ghana Living Standard Survey 7 (GLSS7), poverty remains a predominantly rural phenomenon with rural savannah still ranking highest in poverty rates among the ecological zones. Poverty rates in northern Ghana remain highest in the rural savannah, with 40 per cent of poverty concentrated in the five northern regions.
9. Upper East, North Eastern, Northern, Savannah and Upper West regions continue to have high poverty rates of between 55 per cent and 71 per cent. While half of the regions, namely, Eastern, Brong Ahafo, Ahafo, Bono East, Volta, Oti, Upper East,, Upper West, North East, Savannah and Northern experienced worsening inequality between 2005 and 2016, the other regions had improvements in their inequality status, as the Gini Index for these regions reduced.

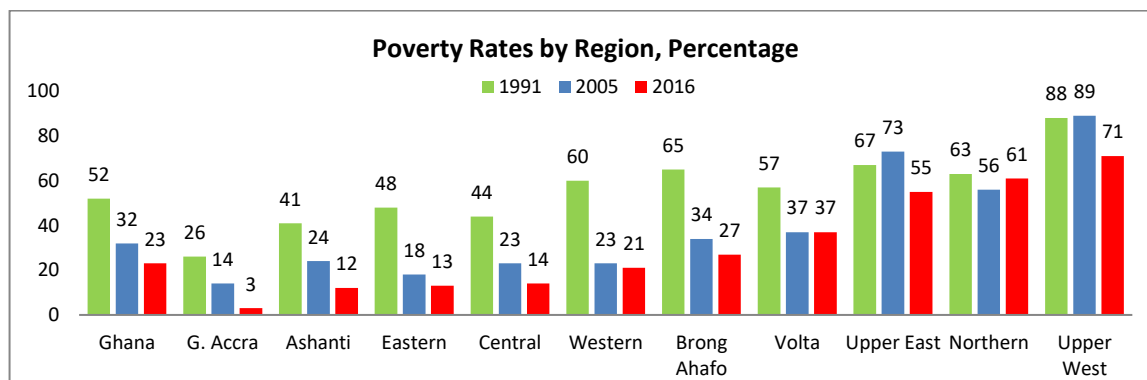


Figure 1: Poverty Headcount Rates by Region, Percentage⁶¹

⁶¹ World Bank 2018, Ghana Systematic Country Diagnostics.

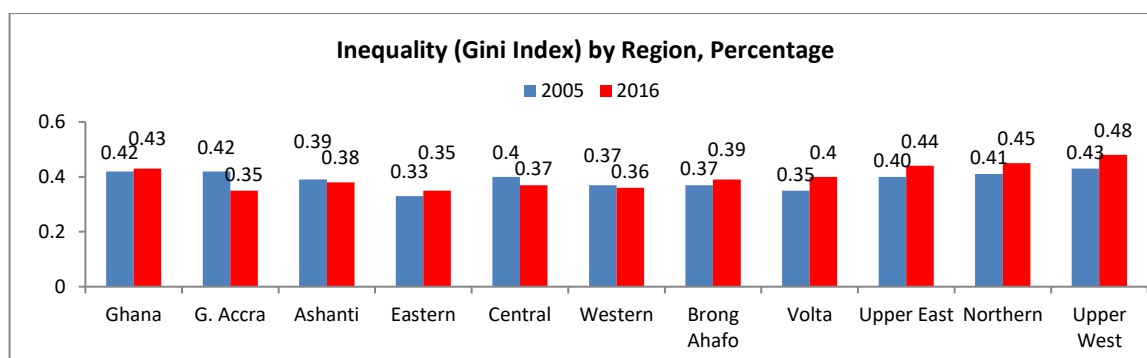


Figure 2: Inequality (Gini Index) by Region, Percentage⁶²

10. **Poverty in rural Ghana:** 55 per cent of the population and 49 per cent of the households live in rural areas, and are mostly engaged in agriculture. In 2017, it is reported that rural poverty is four times higher than poverty rates in urban areas, making it two times higher than it was in the 1990s. This is manifested in different forms, including low incomes, malnutrition, ill health, illiteracy and insecurity. One of the underlying causes of poverty is rooted in the lack of access to markets and roads. The World Bank reports that there is a substantial difference in access to markets and roads between the richer and the poorer districts, as shown in the below Table 1.

Table 1: Road Density, Distance to Market, and Access to Electricity⁶³

	Road density	Distance to market (minutes)	Share of households using electricity (%)
Districts with high poverty rates (1/3)	8.1	218	22
Districts with medium poverty rates (1/3)	8.9	199	36
Districts with low poverty rates (1/3)	12.1	141	59

11. In the northern regions, around 80% of rural households are engaged in agriculture, and poverty is highly connected to insufficient income from agriculture. In part, this is due to poor and uncertain yields. The survey by WFP in 2012 indicated that farmers notably blame inadequate rains (64% of households), inadequate access to irrigation (1% of land), low soil fertility (41%), lack of fertilizer/pesticide (34%), lack of finance / cash (22%) and lack of household labor (8.7%) for uncertain production levels and yields. Low soil fertility and inadequate access to fertilizer are cited 2 to 3 times more as problems by the poorest and most food insecure. Inadequate rains have high impacts due to the lack of access to irrigation infrastructure (1% land) and appropriate water management strategies. In addition to the inadequate rain, the reliance on only one cropping season makes food security highly seasonal. Food insecurity and poverty also partly correlates with farm sizes. About 49% of smallholder farmers are poor (two poorest quintiles) and 21% moderately to severely food insecure against 11% for medium sized (6-10) and 7% for larger farms (more than 10 ha). Districts with a greater share of large farming households tend to have better food consumption rates. Another important dimension relates to livestock ownership. Those in the poorest wealth quintile own on average 2.5 tropical livestock units (TLU), compared with 6.2 TLUs in the wealthiest fifth of households who are therefore more able to cope with shocks by

⁶² World Bank 2018, Ghana Systematic Country Diagnostics.

⁶³ World Bank 2018, Ghana Systematic Country Diagnostics.

selling livestock when in need. The poorest wealth quintile has 4.5 less cattle and 3 times less sheep (the largest animals).

12. **Transhumant herders** are not captured well by statistics and surveys yet they have specific poverty, food security and vulnerability issues. Further assessments are needed as they often share similar resources with farmers which can lead to conflict (e.g. over access to land, water etc.).
13. **Poverty and coping mechanisms:** With about 40 identified main coping mechanisms and social safety nets, the traditional livelihood alternatives are still active, efficient and diversified in Ghana, and used by vulnerable, poor and sometimes medium categories of farmers. Most of these mechanisms only ensure food security, while some allow for savings (e.g. remittances from migration).
14. **Gender.** Ghana is among the champions of gender equality in ECOWAS. It ranks second in its Gender Inequality Index in 2018 (0.538, higher than Sub-Saharan African average of 0.569, 140th place globally). Such an indicator measures various dimensions of gender inequality in access to education, employment, health and political empowerment. Ghana ranked 4th for its gender development index of Sub-Saharan Africa that measures the gender gap between men and women in terms of Human Development Index.
15. However, gender inequality remains high and gender is still an important dimension of poverty and food insecurity in Ghana. About 62% of female headed households fall into the two poorest wealth quintiles compared with 39% of male headed households. Similarly, only 11% of female headed households reach the wealthiest quintile in comparison with 21% of male headed households. Across the northern regions, 30% of female-headed households are food insecure compared with 15% of male-headed households. About 84% of the Ghanaian active female population are engaged in vulnerable employment. Wage disparity also exists. Women earn 57% of men's earnings regardless of the type of employment, education and the age etc. With regard to literacy, UNDP reports 43% of men are more likely to be literate in English than women; a significant gap is present in the older generations, but virtually disappears in the age group of 15-18 years old.
16. Women represent 42% of people engaged in agriculture and agriculture is closely connected to poverty. Therefore, assessing gender inequality along agricultural value chains is key to addressing the gender dimensions of poverty. In Ghana, women have previously been found to achieve lower yields compared to men due to a lack of access to productive resources. Female headed households (FHH) also have less access to land for farming (89% in Northern Ghana vs a 96% national average). FHH are also more likely to be smallholders (farming five acres or less). 87% of FHH are smallholders compared with 60% of male. 4% of farms are more than 11 acres compared with 16% of men heading a household.
17. Agricultural produce traders are mostly women. Their reproductive roles, which are usually defined by social norms, interfere with their productive roles in terms of time available for income-earning activities. A study also showed that gender and household size were the demographic variables that had a significant effect on post-harvest losses in tomato production. Female farmers had significantly higher levels of post-harvest losses than their male counterparts. All things being equal, women tend to use longer period for fruit harvesting, with high levels of post-harvest losses.
18. Limited access of women to land (i.e. collateral) results in more limited access to financial services. In spite of a progressive land ownership system, customary land use systems prevail whereby property rights of the assets is normally with the household heads. Household heads are most often men in Ghana and women have temporary usufruct rights that can be lost when they marry or lose their husband.
19. **Youth.** Ghana has a very young population, with approximately 57% of the population under the age of 25. The National Youth Policy (2010) in Ghana defines

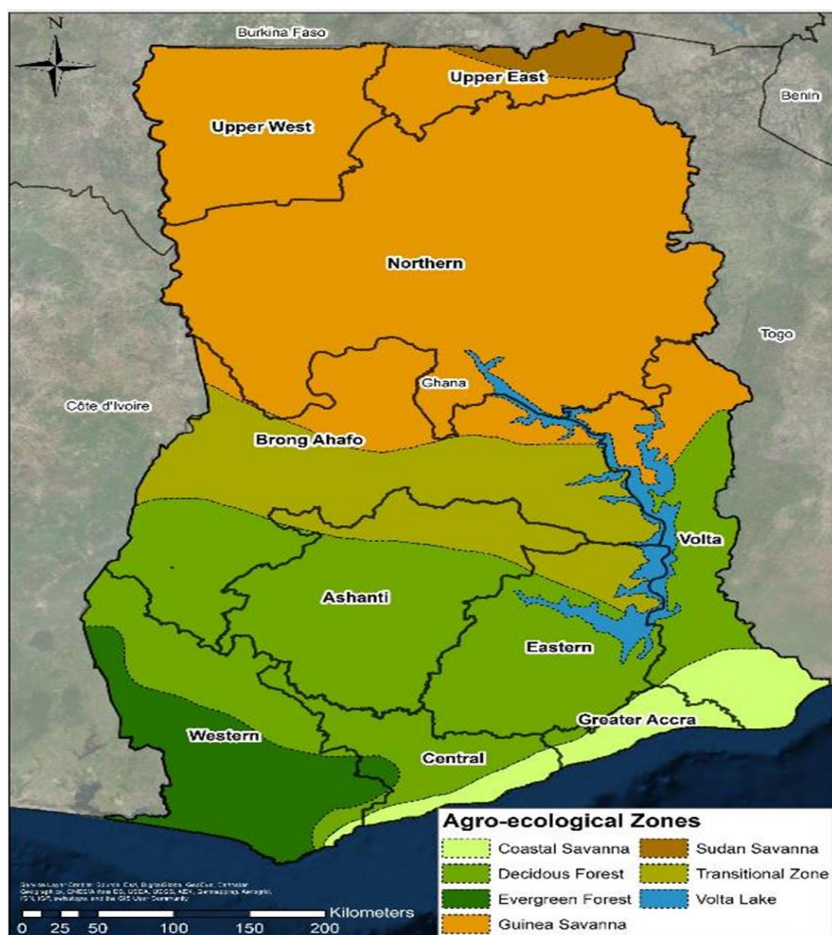
youth as those between 15-35 years. Despite Ghana's economic growth, unemployment rates remain relatively high especially among youth. The total unemployment rate in Ghana was estimated by the ILO in 2017 as 2.4% while youth unemployment remained higher at 4.9%. The overall lack of opportunities, coupled with the occurrence of seasonal drought and flooding in rural areas is leading to an increasing exodus of mainly young men from rural to urban areas, especially from the five northern regions to the south. This results in an aging population in rural areas, high rates of youth unemployment and social inequality.

20. The government identifies the following contributing factors to high youth unemployment: lack of employable skills; mismatch of education and industry; an inability of the economy to create new jobs; and limited access to start-up capital for youth. The levels of unemployment among Ghanaian youth vary across sexes as well as according to the area they live in. In urban areas, unemployment rates are significantly higher than in rural areas because young people are often attracted to cities to search for jobs. The agricultural sector is seen as having the most potential of catalysing economic growth and employment for young people, especially given the growing demand for food and raw materials. However, efforts to create jobs for these young people are often separated from efforts to accelerate agricultural growth and improve food security. At the same time, there is also a perception that agriculture and farming are for elderly, illiterate and rural people, not as a venture that could provide job security nor a stable income. This poses a challenge for efforts to attract youth into agriculture. The GSS from 2015 reports that about 14.3% of young people in agriculture have abandoned their farms and remain idle in their communities or have migrated to cities in 2015.
21. **Nutrition and health.** Significant regional disparities exist concerning nutrition and food security in Ghana. The prevalence of stunting (chronic malnutrition or low height-for-age) is 19 per cent nationally, but rises to 33 per cent in the north. The prevalence of acute malnutrition (wasting or weight-for-height) is also much higher in the northern regions, and at 9 per cent, is highest in Upper East region. Central Region also has high levels of both stunting and wasting, at 22 per cent and 8 percent, respectively.
22. Food insecurity is a major contributing factor to the poor nutritional status of the population in the northern regions of Ghana. Among the regions of greatest concern, which include Upper East, North Eastern, Savannah, Upper West, Northern, Brong-Ahafo, Ahafo, Bono East, Oti and Volta, 16 per cent of households were considered food insecure.
23. Food insecurity is linked to the inability of households to produce sufficient quantities of staples to meet their food needs. This can be due to poor soil quality, unfavourable weather conditions, constrained access to inputs, and limited financial resources to expand production. Also, food insecurity is a highly seasonal phenomenon in the north, as there is only one rainy season and a long dry season. July is the peak of the lean season, with 90% of households experiencing issues of access to food which is more pricy and less available, while poor agricultural households have often exhausted their food stocks and need to buy food on the market at high prices (harvest around September-December).
24. Overweight and obesity are increasingly important issues in Ghana (33 to 40 per cent increase since 2003 for overweight in ECOWAS) and affect women disproportionately. In Ghana, 41 per cent of women are overweight against 22 per cent of men. Gender disparity is stronger for obesity, with 4.5 per cent of men being obese compared to 16 per cent of women being considered obese. Overweight and obesity are an indicator of poor nutrition due to the low availability and relatively high cost of more nutritious foods, such as legumes and proteins.

25. **Achieving the sustainable development goals (SDGs) and the Paris climate agreement in Ghana.** Ghana is committed to achieving the SDGs and the 2030 Agenda. Ghana has developed its Sustainable Development Goals (SDGs) Budget Report to show how the country is tracking the financing of the implementation of SDGs. Ghana has committed to pursue coordinated actions to reduce the negative impacts of climate change on its citizenry and to create a low carbon emission development pathway. As of October 2018, Ghana was about to finalize and present its ambitious Nationally Determined Contributions (NDCs) on the basis of the Intended INDC submitted in 2015, which contains a set of 31 climate actions covering seven sectors with a budget of \$22.6 billion for 10 year period starting from 2020.

Environment and climate context

26. Ghana signed the Paris Agreement on Climate Change and developed its INDC (National Determined Intended Contribution) which is anchored in the vision that the country has drawn for its future by 2030: to become an emerging country. In all, 20 mitigation and 11 adaptation programme actions in the economic sectors are proposed for implementation in the 10-year period (2020-2030). Ghana's National Determined Contributions (GH-NDCs) also provide policy direction for the GoG's interventions on mitigation and adaptation. Ghana's emissions reduction goal is to unconditionally lower its GHG emissions by 15 percent relative to a business-as-usual (BAU) scenario by 2030.
27. **Ghana's agro-ecological zones.** Based on climate, soil and vegetation conditions, Ghana is divided into six main agro-ecological zones. These include the Coastal Savannah, Rain-forest, Deciduous Forest, Forest-Savannah Transition, Guinea Savannah and Sudan Savannah. These zones define the physical production environment, comparative advantage for production of different commodities and vulnerabilities to climate change. Successful agriculture and environmental sector policies have recognized the comparative advantage and specific needs of these different ecological zones of the country.
28. The vegetation in the Coastal Savannah zone is mainly grass and scrub with rather poor soils. Staple crops such as maize, cassava and vegetables are widely produced in this zone, which also supports livestock, including cattle. The Deciduous Forest zone includes two primary forest types: moist semi-deciduous forest and dry deciduous forest. The northern boundary of the zone follows the Kwahu Plateau, and the southern edge blends into the moist rain forest type. The zone has a more clearly defined dry season than the evergreen forest types. The rain-forest zone has the largest rainfall, but the soils are generally not very fertile, and agriculture in the zone is dominated by cocoa and staple crops such as cassava and plantain. The forest-savannah transitional zone covers regions north of the forest zone, where forest vegetation has given way to savannah. The soils are fairly fertile and support a wide variety of crops such as maize, yams, cassava and plantain. Large-scale commercial farming is widespread in the zone. The Guinea savannah zone covers about 57% of the land area in the country. The Guinea savannah zone has only one rainy season, which starts in late April or early May, reaches a peak in late August or early September and tails off in October. This is followed by a long dry period in which crops can only be grown under irrigation. The soils are generally poor with better soils in the floodplains and along river banks. Rice is the most important cash crop in the zone and is produced in the valley bottoms. Cotton, another important cash crop, is more important to small-scale farmers. Millet, sorghum and yams are principal food crops in the zone, but maize, groundnuts and vegetables are widely produced. Livestock production is an important activity in the zone with over 70% of the country's population of cattle, sheep and goat. Figure 4 shows the Agro-ecological zones of Ghana.

Figure 3. Agro-ecological zones of Ghana^{64, 65}

29. **Land.** Only 17.5% (4.2 million ha) of Ghana's total land area is classified as arable or permanently cropped land. Cocoa, the main cash crop and other permanent crops are grown on 2.2 million ha (9.2%) of the total land.
30. **Forest, wetland and biodiversity.** Ghana's terrestrial ecosystem spreads in two major biomes; namely, the tropical high forest and the savannahs. Each of these ecological zones has unique biological resources that define the area's human, faunal and floral population. The recent forest assessment of the high forest zone estimated the total forest land in Ghana at 9.3 million ha in 2015. This is made up of 1.6 million ha closed forest and 7.8 million ha open forest. In the high forest zone (HFZ), cocoa farms, subsistence crops and fallow lands are the dominant land use types. Off-reserve forests have roughly 6.5 million ha distributed as trees and forest patches in agricultural lands, forest fallows, riparian forests, sacred groves etc.
31. Wetlands constitute about 10 percent of Ghana's total land area. The three main types of wetlands are: i) marine/coastal wetlands; iii) inland wetlands; iii) human made wetlands. Wetlands in Ghana are very productive and their resources have been traditionally used as a source of the basic necessities of life, ranging from building materials, hunting and fishing areas, to sources of water for humans and livestock.

⁶⁴ Dazé and Echeverría, 2016.

⁶⁵ GASIP, 2018.

32. The importance of biodiversity to the Ghanaian economy in terms of jobs creation, incomes for local communities, foreign exchange earnings through forest products export and protection of the environment has not been fully estimated. Biodiversity in the form of timber and wood products, non-timber products (including bush meat and other wildlife products, bamboo, rattan, essential oils, tannins, resins, gums, dyes, cork, honey, and medicinal plants); environmental services, (such as watershed protection, biodiversity conservation, carbon sequestration and clean air, micro-climate regulation/modification, soil fertility improvement, soil conservation/soil erosion control, recreational aesthetic value); and ecotourism has been a source of income and job creation for Ghanaians.
33. **Water resources.** Ghana is well endowed with water resources. Ghana's water resources potential is divided into surface and groundwater sources. Surface water resources are mainly from three river systems that drain Ghana; namely, the Volta, South Western and Coastal river systems. The Volta system, which makes up 70% of the total river system in Ghana, consists of the Red, Black and White Volta Rivers as well as the Oti River. The South-Western river system is made up of the Bia Tano, Ankobra and Pra rivers. The Tordzie/Aka, Densu, Ayensu, Ochi-Nakwa and Ochi-Amisah comprise the Coastal river systems. The South-western river system covers 22 per cent while the coastal river system covers the remaining 8 per cent.
34. Annual rainfall is approximately 2,000 mm/year in the south-west of Ghana, 950 mm/year in the north and 800 mm/year in the south. With appropriate technology and incentives, rainwater harvesting could provide a reasonable amount of water for household and other institutional water needs thereby reducing demand on the pipe-borne system.
35. The main consumptive uses of water in Ghana are water supply (37%) and irrigation and livestock watering (48%). The major uses of water resources are water consumption, irrigation and livestock watering. Domestic and industrial urban water supplies are based almost entirely on surface water, either locked up in small dams or diverted by levees in rivers. Water supplies in rural areas, however, are obtained almost entirely from groundwater sources.
36. The main water resources challenges include water conservation and pollution due to illegal mining activities. Climate change also put stresses on the water management in Ghana. A study by the Water Resources Commission shows that even without climate change considerations, Ghana is predicted to become a water stressed country by 2025. In the face of increases in the frequency and severity of extreme weather events in the future, it is most likely that climate change will worsen the state of rivers and other water bodies in the future. Expected increased floods due to climate change would carry pollutants into water bodies, restricting their use and putting further constraints on water availability to meet growing demand. Women and children will be affected the most as they will have to spend more time travelling longer distances in search of good quality water.
37. **Forest degradation.** The forest degradation rate in Ghana is estimated at 45,931.03 ha per annum since 1990. The size of the closed forest has decreased from 2.7 million ha in 1990 to 1.6 million in 2015 indicating a depreciating rate of 192,648.25 ha per 5 years. The assessment further revealed that less than 20% of forest reserve areas have acceptable levels of integrity. Only 2% are considered to be in "Excellent" condition and another 14% in "Good" condition. Currently, the survival of the remaining reserves is at risk of depletion from continued illegal-logging and agricultural clearing. However, there are increases in populations of some forest species, and generally, there has been an increase in forest cover, but the forest quality has declined. Many forest reserves are degraded due to wildfires, excessive extraction of timber and non-timber resources and human encroachment for agricultural purposes.

38. The northern savannah is characterized by rapid deforestation caused by high intensity of wild fires, wood fuel production, and illegal surface mining. There are also the increasing incidents of floods and droughts (leading to land degradation and desertification). This situation has exacerbated food insecurity, water scarcity, disruption of social structure (emigration), loss of cultural heritage, loss of energy sources, loss of lives and property in the north. The trend has also led to loss of habitats, decline in species populations, local species extinctions, increasing vulnerability to climate change impact, increasing incidence of alien invasive species, human emigration from savannah to southern forest zones, increasing transhumance leading to local and national insecurity, increasing poverty incidence as a result of loss of livelihood options, declining living standards, decline in soil fertility and productivity, increasing food insecurity, decline in the contribution to the GDP, increasing urbanizations leading to expansion in some areas and decline in others.
39. **Land degradation and soil erosion.** Ghana has an estimated total arable land area of about 13,628,179 ha. However, most of the soils of these arable lands are less fertile. The coarse nature of these soils results in poor soil structure, reducing their ability to hold water for a long period. As a result, dry conditions easily occur within the growing season.
40. Soil erosion is one of the major causes of land degradation in Ghana with its negative effects on soil conditions. Soil erosion is generally a result of unsustainable farming practices, bush fires⁶⁶, mining activities⁶⁷, urbanization and industrial activities. The main forms of soil erosion in Ghana are sheet erosion through surface runoff, rill erosion and gully erosion. Studies estimate that 23% of Ghana's land is prone to very severe sheet and gully erosion, 46% to severe soil erosion and 31% to moderate to slight soil erosion. Soil erosion, in its various forms, is present in all agro-ecological zones and regions in Ghana. However, the most vulnerable agro-ecological zone to soil erosion is the interior savannah (Guinea and Sudan Savannah zones) which covers nearly 50% of the country with the Upper East Region being the most degraded region.
41. Ghana has one of the highest rates of soil nutrient depletion among sub-Saharan African countries⁶⁸ although it has one of the lowest rates of annual inorganic fertilizer application (8 kg per ha)**Error! Bookmark not defined.** Wild fire and slash-and-burn agricultural practices have had a negative impact on forestry coverage and soil fertility. The degradation of soil, water and biodiversity constrains agricultural productivity, income and these have a negative effect on health and environment.
42. **Droughts and Floods.** Droughts are a recurrent feature in most areas with devastating impacts on vegetation, soil and livestock. Recurrent droughts since 1982 have contributed to desertification and caused wild bush fires and extensive land degradation. Periods of severe drought resulting in reduced crop productivity and declines in livestock herds, resulting in food shortages. Floods have affected nearly 4 million people over the last 40 years, both related to river floods (mainly in the Volta River System) and in the urban areas of Accra. The recent variations in

⁶⁶ Bush fires occur annually in most part of the country either for use in land preparation for agricultural purposes or rangeland management, for hunting or in pasture management in the Guinea and Sudan savannahs. Burning, however, causes the loss of soil organic matter, resulting in degradation of the soil. Burning also exposes the soil to the erosive forces of the wind during the dry season and rain during the growing season, thereby depleting macro-nutrients such as nitrogen, phosphorus and organic matter from the soil (Ghana State of the Environment Report, 2016).

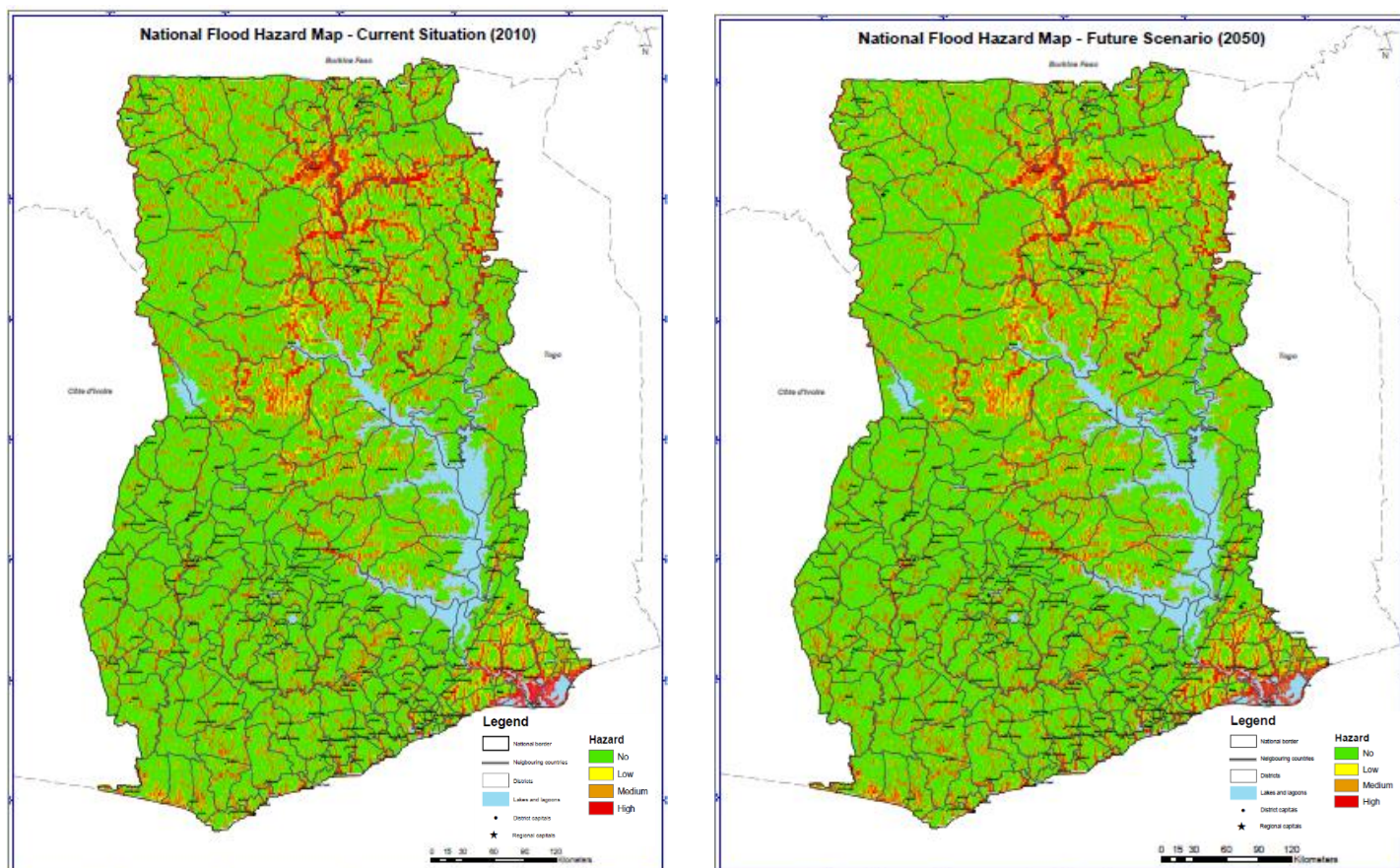
⁶⁷ Studies by Schueler et al. (2011), showed that surface mining has resulted in deforestation (58%), a substantial loss of farmland (45%) within mining concessions in the Western region, and widespread spill-over effects as relocated farmers expand farmland into forests.

⁶⁸ Annual projected losses are 35 kg Nitrogen ha⁻¹, 4 kg Phosphorus ha⁻¹ and 20 kg Potassium ha⁻¹.

rainfall patterns due to climate change and climate-related events is a hazard, along with the predicted risk of increased occurrence of floods in the future is high.

43. The areas most affected by flooding in Ghana are the Volta basin (Oti River, White Volta and Black Volta) in the five northern regions, the Delta of the Volta River downstream of the Akosombo dam and the low lying urban areas, close to the coast, notably the Greater Accra Metropolitan Area. In terms of vulnerability, all settlements in the low-lying parts of the drainage basins are particularly vulnerable.

Figure 4: Flood hazard map (left), Flood vulnerability map (right). Source: UNDP (2015)⁶⁹



44. **Climate change in Ghana.** There are two key climate change related issues in Ghana, namely: the increase of temperature; and uncertainty in precipitation. There are clear signals of a warming climate in Ghana. National historic data (1960-2000) has indicated the climate change in Ghana, reporting a progressive rise in temperature and decrease in mean annual rainfall in all agro-ecological zones in Ghana. An increase of 1°C has been observed in the past 40 years. Another recent projection estimates temperature increases of 1.7°C to 2.0°C by 2030 in the Northern Savannah regions, with average temperatures rising as high as 41°C. Annual rainfall in Ghana is highly variable making identification of long-term trends difficult. Little agreement exists on future trends in precipitation or seasonality in Ghana. The likely increase in the average temperature and rainfall patterns linked to by climate change is widely recognized as a significant developmental challenge in Ghana.
45. The main concerns regarding the potential impacts of climate change based on sectoral impacts, vulnerability, and adaptation assessments that are highlighted

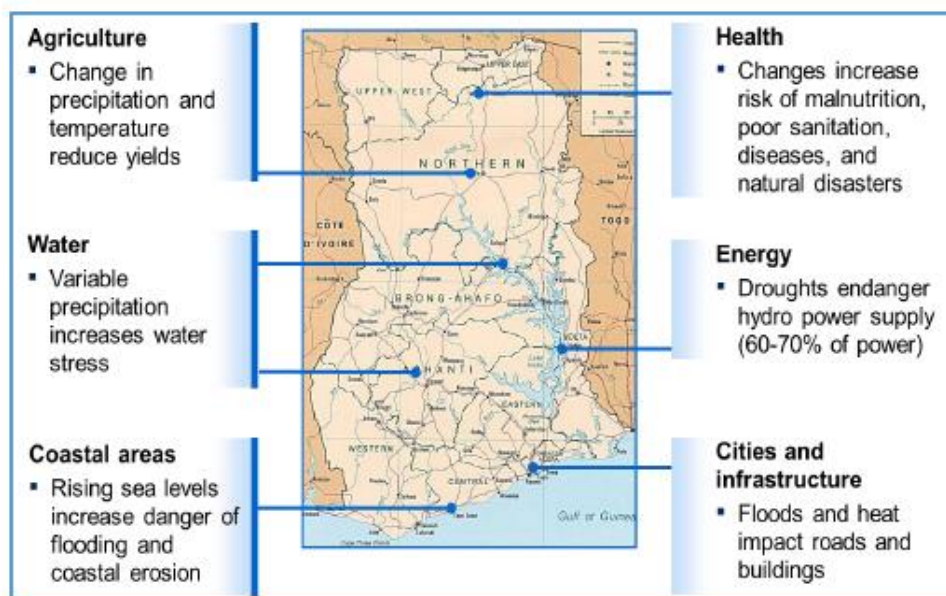
⁶⁹ UNDP, 2015.

within Ghana's second and third National Communications to the United Nations Framework Convention on Climate Change (SNC) include the following.

- Increased pressure on water, reducing the potential for hydropower.
- Impact on agriculture, with reduced yields leading to increased poverty and food insecurity, and the loss of national revenue from cash crops such as cocoa.
- Increased migration from the north, with growing pressure on urban services.
- Deteriorating health as a result of increased incidence of diseases and reduced access to water and food, compounded by the disruption of the delivery of health services.
- Severe impacts on land use, leading to loss of biodiversity and soil fertility, land degradation and increased deforestation.
- The impact on women, who are particularly vulnerable to the impact of climate change, given their higher levels of poverty and their responsibilities for household water, food and fuel.
- Potential conflicts over use of scarce natural resources.
- Loss of human settlements due to sea level rise and coastal erosion.

46. Ghana faces significant challenges related to the negative impacts of climate change which directly or indirectly affects ecology, economy and society. The key sectors include agriculture, health, water, energy, coastal areas, city and infrastructure. Figure 6 shows the major climate vulnerabilities in Ghana.

Figure 5: Major climate vulnerabilities in Ghana. Source: TNC, 2015⁷⁰



47. **Climate change and agriculture vulnerability.** Historically, the agricultural sector in all six Agro-ecological zones in Ghana has been plagued by droughts and floods as the main extreme weather vulnerabilities that have affected millions of rural households. In addition to exacerbating the traditional vulnerabilities, anthropogenic climate change is intensifying new risks in the form of high temperatures, windstorms, climate induced soil erosion pest infestation and dry spells.

⁷⁰ Ghana's Third National Communication Report to the UNFCCC, 2015.

48. Potential decreases in total rainfall and variability will negatively impact crop production. Rainfall patterns of the transitional zone are already demonstrating changes, with the short dry season in July and August becoming wetter, affecting farmers' ability to prepare land for a second crop. Crop simulation models demonstrated significant losses in crop production by the mid-21st century, shrinking the country's GDP by between 1.9% and 7.2%. Of particular concern is the production of cocoa, Ghana's biggest export, as it is highly vulnerable to climate change; production decreases will negatively affect the country's economic stability.
49. It is estimated that the length of agricultural production seasons in most part of West Africa and Ghana will reduce by 5% or more by 2050 due to the warmer temperatures and the frequency as well as severity of drought. In the dry land areas, crop productivity is depressed by high evaporative demand, runoff and drainage losses following intense erratic rainfall. Moreover, there are other potential stressors including pest and disease pressure, increased frequency of extreme events such as droughts and floods that contribute towards or exacerbate the projected negative yield change. Major staple crops including maize, sorghum, rice, millet, groundnut, okra, cassava and yam are sensitive to climate-related risks and hazards. It is reported that since 2000, yields of food crops have decreased and further projected to decrease by about 15% by 2050. Climate change is projected to cause an overall yield to decrease of less than 25% for rain-fed maize and rice and above 25% for groundnuts. With the 1990/1991 cropping season as the base year, cassava yields are expected to correspondingly decrease by 3%, 13.5% and 53% in 2020, 2050, and 2080, and cocoyam yields are projected to decrease by 11.8%, 29.6% and 68% in 2020, 2050 and 2080.
50. The most prominent climate-related hazards affecting the agricultural sector include: (i) water stress for crops with increasing dry spells, (ii) degradation and erosion of arable land (with compound effects across wider landscapes); and (iii) intermittent floods and the resulting damage to critical infrastructure. Moreover, rising temperatures, increasingly erratic rainfall patterns and more droughts that are frequent and floods create challenges for food security and management of land, water and other natural resources. These challenges are particularly critical for rural communities, where rain-fed agriculture and livestock rearing are the primary livelihood strategies. These strategies are strongly dependent on rainfall and other climatic variables, making them highly sensitive to climate change. For the poorest women, youth and men, this sensitivity coupled with low capacity to adapt, results in high vulnerability.
51. **Vulnerability in the north.** Northern regions Ghana has been identified by numerous studies (NCCP, 2012; Owusu, 2018; Saito et al., 2018; Acheampong et al., 2014; Armah et al., 2012) as more vulnerable to the impacts of climate change than the southern part of the country due to the combination of climatic and non-climatic stressors. The Third National Communication identified long dry-spells, frequent flooding, erratic rainfall and rising temperatures as the main climatic stressors prevalent in the area. Poverty and out-migration of the youth are non-climatic stressors that exacerbate the climatic vulnerability of northern Ghana. Vulnerability is a function of the character, magnitude, and rate of climate variation to which a system is exposed to its sensitivity, and its adaptive capacity. The majority of the population in northern Ghana lives in abject poverty and their livelihoods revolve around rain-fed subsistence agriculture. Similarly, the adaptive capacity of these regions is the lowest due to low socioeconomic development and heavy dependence of local economies and livelihoods on rain-fed systems such as agriculture and forestry.
52. The socio-economic groups affected most by climate change include small-scale food crop farmers, women, livestock farmers, fishermen and fishmongers, slum dwellers, and migrant farm workers. These groups are vulnerable due mostly to institutional bottlenecks, legal frameworks, poor capacities and market imperfections.

53. The effects of climate change on women, men, youth and young adults is expected to be highly disproportional in the five northern regions. Considering that majority of the population in the regions are farmers, known for its high susceptibility to risks of drought, flood and uncertain precipitation; this means that climate change endangers food security as well as families' well-being and capacity to survive climate change is expected to aggravate the vulnerabilities of all groups.
54. Water access limitations due to technical inefficiencies are also a raising concern in the North. Water scarcity particularly affects women and children in rural communities, who are tasked with collecting water and must travel longer distances to obtain good-quality water. Communities living near water bodies can also be put at risk by increases in intensity of rainfall and incidence of flooding.

Institutions and legal frameworks

Institutions

55. The Ministry of Environment, Science, Technology and Innovation (MESTI) is the central point for institutional coordination on environmental issues. The Environmental Protection Agency (EPA) under the MESTI is responsible for co-ordinating the climate change activities and carrying out GHG inventories. EPA has a National Climate Change committee made up of representatives from ministries, universities, research institutions private sector and Non-Governmental Organisations (NGOs). A Designated National Authority for Clean Development Mechanism has been established under the MESTI. The Ministry of Finance has also set up a climate change desk to support accessing the climate change related funding.
56. The Ministry of Gender, Children and Social Protection (MoGCS) is responsible for gender mainstreaming across all ministries, departments, and agencies as well as social protection program. There is a directorate of women in agriculture (WIAD) of MoFA to mainstream gender in agriculture. The leading ministry supporting youth in Ghana is the Ministry of Youth and Sports, which has the mandate to promote youth employment and self-development.
57. The Ministry of Food and Agriculture (MoFA) is mainly responsible for regulation and development of the agriculture sector. Its central line and technical directorates are complemented by regional and district directorates or district agricultural development units. The ongoing efforts to decentralize the latter as directorates under the district assemblies imply strong linkages to the Ministry of Local Government and Rural Development (MLGRD). Ghana Irrigation Development Authority (GIDA) is responsible for supporting the formation of Water User Associations. MoFA's field presence is among its key strengths, although the number of agricultural extension agents, their qualifications and operational resources are far from adequate to provide reliable technical assistance. Institutional strengthening of MoFA is needed in the areas of monitoring and evaluation (M&E), policy analysis and coordination.

Policy and regulatory frameworks

58. **Climate change.** To respond to climate change, the GoG has put in place national policies, strategies and regulatory frameworks as listed below:
- **National Environment Policy (NEP):** the policy seeks to maintain ecosystem and ecological processes, ensure sound management of natural resources and the environment, adequately protect against harmful impacts and destructive practices and preserve biological diversity.
 - **National Climate Change Policy (NCCP):** the legal framework for climate change and disaster risks management. It provides strategic direction and coordinates issues of climate change in Ghana, linking with all the key sectors and national development. GoG has highlighted Climate Change Adaptation

(CCA) and Disaster Risk Reduction (DRR) as key development priorities within the NCCP and CCAS.

- **National Climate Change Adaptation Strategy (NCCAS):** the strategy seeks to ensure a consistent, comprehensive and a targeted approach to increasing climate resilience and decrease vulnerability of the populace, deepen awareness and sensitisation of the general public particularly policy makers about the critical role of adaptation in national development efforts.
59. Ghana's Food and Agriculture Sector Development Policy (FASDEP) also provides framework for IFAD's mainstreaming and targeting. FASDEP is developed as a policy of the Government of Ghana to guide development and interventions in the agriculture sector and also enhance the environment for all categories of farmers, while targeting poor and risk prone and risk-averse producers.
 60. **Gender.** Ghana has for a long period had strong institutions and policies to address issues related to gender and mainstream gender equality. A National Gender Policy was developed by the MoGCS for gender mainstreaming across all Ministries. The Affirmative Action Policy of 1998 provides for a 40% quota of women's representation on all government and public boards, commissions, councils, committees and official bodies, including Cabinet and the Council of State. There is a requirement by the National Development Planning Commission (NDPC) for ministries, departments, and agencies to allocate at least 40 per cent of their budget to gender issues but this is not being adhered to in disbursement. Gender and Agriculture Strategy (GADS) supports gender mainstreaming process and women empowerment. Agricultural policy and investment plans include gender equality and women empowerment actions, notably along inclusive M&E, food-based nutrition education, food safety, and value chain development. The GADS has an affirmative action programme where men and women are benefitting from all crop interventions, with women forming 40 per cent of beneficiaries. The Livestock Production Directorate mainstreams gender and includes an affirmative action of 30 per cent of women beneficiaries.
 61. Civil society is very active on gender and played a strong role through the Ghana Women's Manifesto, which led to gender mainstreaming in the Land Administration Project (PAL). It has developed a gender mainstreaming strategy. The Ghana Land Bill contains gender and spousal provisions to ensure gender equality and the protection of women and vulnerable persons; it prohibits discriminatory land allocation, encourages joint registration, and restricts the transfer of land by spouses without consent. The land strategy includes actions to raise awareness of women at the formal and customary level through dialogue.
 62. **Youth.** Youth empowerment is a cross-sectoral theme which is addressed by the different ministries and donor funded projects. The National Youth Policy was developed in 2010 by the Ministry to Empower the Youth. The policy recognizes that "the youth are one of the critical resources of the nation considering their potential, numbers, vitality and capabilities as a change agent for national transformation". The National Youth Authority was established in 1974 to coordinate youth empowerment activities facilitating private and third sector provider investments. In 2015, the Youth Employment Agency was also established to empower youth by providing appropriate training and capacity building opportunities as well as by supporting the identification of employment. In terms of agriculture, Youth in Agriculture and Aquaculture (YAAP) is one of the MoFA's programme which aims to engage youth as a leading agent for the transformation of the sector.
 63. **Poverty and social protection policy.** Ghana adopted a social protection policy for the period of 2015-2020 that defines social protection as "a range of actions carried out by the state and other parties in response to vulnerability and poverty, which seek to guarantee relief for the population who for any reasons are not able to provide for themselves". It seeks to provide sustainable mechanisms for the

protection of persons living in situations of extreme poverty and related vulnerability and exclusion through an integrated platform of effective social assistance, social and productive inclusion, social services, labour market protection and social insurance.

64. MoGSP has initiated five flagship programmes to provide the social protection to the marginalized population⁷¹. The following two programmes address rural poverty and support agricultural livelihoods:
- **Ghana's Livelihood Empowerment Against Poverty Programme (LEAP):** launched in 2008, provides cash and health insurance to the extremely poor households across the country. It aims to alleviate short-term poverty and encourage long-term human capital development. As at April 2018, it covered all 254 districts nation-wide with 213,044 beneficiary households, which translates into about 937,904 individuals, 56% of whom are women. LEAP targets households that are first of all extremely poor and that secondly have individual household members who fall into the categories of 1) persons above 65 years 2) care givers of orphan and vulnerable children and 3) persons with disabilities and without productive capacity. LEAP deploys self-targeting approach. The special needs of LEAP's target group for each category are captured through consultation at district assemblies.
 - **Ghana School Feeding Programme (GSFP):** seeks to deliver a well-organized, decentralized intervention providing disadvantaged school children with nutritionally adequate, locally produced food thereby reducing poverty through improved household incomes and effective local economic development. The program therefore contributes both to poverty reduction, education, nutrition and supports smallholder production as they are preferred suppliers to the programme. At the time of 2015, the program served 1.7 million children engaging 20,000 caterers.
65. Planting for Export and Rural Development (PERD) is one of MoFA flagship programme aimed at promoting the production of the export oriented crops and improve rural livelihood. In addition, MoLGRD implements labour intensive public works targeting the North which includes initiative related to land and water management, such as the development of small dams and dugouts to mitigate the impacts of climate.
66. **Nationally determined contributions.** Ghana has submitted its mitigation and adaptation actions in its Intended Nationally Determined Contributions (INDC). The inclusion of both mitigation and adaptation in the INDC resonate with the medium-term development agenda (Ghana Shared Growth Development Agenda II – GSGDA 2), and SDGs. In all, 20 mitigation and 11 adaptation programme of actions in the economic sectors are proposed for implementation in the 10-year period (2020-2030). Ghana's National Determined Contributions (GH-NDCs) also provide policy direction for government's intervention on mitigation and adaptation. Ghana's emission reduction goal is to unconditionally lower its GHG emissions by 15 percent relative to a business-as-usual (BAU) scenario emission of 73.95MtCO_{2e} by 2030. Without prejudice to the outcome of our emission reduction goal, the outlook of Ghana's emission trajectory for 2020 to 2030 is projected as follows: i) Under BAU emissions are expected to rise from 19.53 MtCO_{2e} in 2010 to 37.81 MtCO_{2e} in 2020, to 53.5 MtCO_{2e} in 2025 and 73.95MtCO_{2e} in 2030 ii) Under the unconditional emission reduction goal, emissions are expected to decrease by 12 percent and 15 percent relative to the BAU emission levels in 2025 and 2030 respectively.

⁷¹ Five flagship programs are namely: the Livelihoods Empowerment Against Poverty (LEAP), the Labour Intensive Public Works (LIPW), the School Feeding Programme (SFP), the National Health Insurance (NHIS), and Exemptions and the Basic Education Capitation Grants.

Programmes and partnerships

67. This section presents an overview of past and ongoing programmes and interventions on poverty reduction, climate change and disaster risks management of the government, other development partners, including private sector and civil society which provide potential synergies for joint programmes and coordination mechanisms. Table 3 presents the list of programmes and implementing institutions in Ghana that IFAD could leverage on.

Table 2: Programmes and partnerships

Project title/objective	Organization(s)	Status	Location
LEAP: Livelihoods Empowerment Against Poverty Objective: provision of cash transfer support to support the marginalized population	Ministry of Gender and Child Protection, DFID, World Bank and UNICEF	On-going	National wide
Adaptation of Agro-ecosystems to Climate Change (AAESCC) Objective: to reduce climate-related yield losses through agriculture policy and land-use systems	German Development Cooperation (GIZ) & Ministry of Food and Agriculture (MoFA)	Completed	Savannah agro-ecological zone
Ghana Sustainable Land and Water Management Project (SLWMP)	MESTI/World Bank	On-going	Savannah agro-ecological zone
AGRA PASS programme Objective: To improving the health of the soils in Northern Ghana	AGRA/MoFA	On-going	Savannah agro-ecological zone
Ghana Agricultural Insurance Pool (GAIP)	MoFA/Private sector	On-going	Savannah agro-ecological zone
Flood Early Warning System	Water Resources Commission	Completed	Northern Ghana
Youth in Agriculture Programme (YIAP). The YiAP seeks to encourage youth to see agriculture as an occupation among youth.	MOFA, MoFAD, NGOs and qualified private sector partners	On-going	Nationwide
The Youth Enterprise Support Fund (YES)	NBSSI, National Youth Associations, Ministry of Youth and Sports MOTI/ MOF	On-going	Nationwide
Economics of adaptation to climate change Objective: assessment of the cost and benefits of climate change adaptation	World Bank	Completed	Nationwide
REED+	World Bank, Forest Investment Programme	On-going	Semi & high forest zones
Netherlands Climate Assistance Programme (NCAP) Objective: support in the efforts to formulate and implement effective policies to combat climate change	Netherlands Embassy & Ministry of Foreign Affairs	Completed	Nationwide
Climate Change Adaptation and Development Programme Initiative (CC-DARE)	UNEP, UNDP	Completed	Nationwide
UNDP Africa Adaptation Programme Objective: support integrated and comprehensive approaches to climate change adaptation in Ghana	UNDP	Completed	Nationwide
Adaptation Learning Programme (ALP) Objective: increase capacity of vulnerable households in sub-Saharan Africa to adapt to climate change	CARE International	On-going	Northern Ghana
Innovative Insurance Products for Adaptation to Climate Change (IIPAC) Objective: to enable insurance sector of Ghana offer innovative and economically sustainable	GIZ	On-going	Upper West

insurance products against extreme weather events			
Integrating Climate Change into the Management of priority health risks Objective: develop and implement a national strategy to streamline climate change risks into health sector policies and programmes	Global Environment Fund Special Climate Change Fund, Ministry of Health	Completed	Nationwide
Sustainable development of rain-fed lowland rice production in the Republic of Ghana Objective: Dissemination of the "model for sustainable development of rain-fed lowland rice production (Model)"	Japan International Cooperation Agency (JICA)	Completed	Northern and Ashanti regions
Upper West Integrated Agricultural Development Objective: raise the income of small-scale local farmers income and reducing poverty through agriculture processing	JICA	On-going	Upper West region
School meals programme Objective: provide hot school meals in the most food-insecure parts in northern Ghana	World food programme	Completed	Northern Ghana
Treatment of malnutrition in people with HIV Objective: provide nutritious foods to 3, 000 moderately malnourished people living with HIV who are on anti-retroviral therapy	World food programme	On-going	Nationwide
Local food for improved nutrition Objective: to reduce stunting and micronutrient deficiencies among children under 2 years in northern Ghana	World food programme	On-going	Northern Ghana
Ghana Grains Development project Objective: agricultural research and extension with the focus on institutional and capacity building and gender equality	Global Affairs Canada/Ministry of Gender and Social Protection	Completed	Nationwide
Land Administration Phase 1 Objective: to consolidate and strengthen land administration and management	World Bank	Completed	Nationwide
Land administration Phase 2	World Bank	On-going	Nationwide
Ghana Productive Safety Net project Objective: to support government of Ghana to strengthen safety net systems that improve productivity of the poor	World Bank	On-going	Nationwide
Restoration of productive capacities of flood affected agricultural households in Ghana Objective: assist farmers to purchase agricultural production inputs and rehabilitate irrigation schemes. Train farmers to build their capacities on resilience to damages related to climate change.	FAO/MoFA	Completed	Accra metropolis, Ashaiman and Ga south municipal
Creating agribusiness employment opportunities for youth through sustainable aquaculture systems and cassava value chains in Ghana Objective: to create agribusiness employment opportunities for the youth through the development of sustainable aquaculture systems and cassava value chain	FAO/MoFA	On-going	Nationwide
Enhanced Integrated Soil Fertility Management (EISFERM) project Objective: reduce high poverty rates through increased production of soya beans and maize for food security through integrated soil fertility management	AGRA	Completed	Upper West region
Multinational NERICA rice distribution project: Towards sustainable agriculture Objective: to improve food security and reduce poverty for farming households	ADB/MoFA	Completed	Nationwide

Implementation and coordination mechanisms

68. MoFA seeks to improve coordination and harmonization of agricultural interventions among partners. Platforms exist and are supposed to engage other ministries and actors but needs to be reinforced with stronger attention to bring smallholder voices in a structured manner. Platforms include Medium-Term Agriculture Sector

Investment Plan (METASIP) Steering Committee, Strategic Analysis and Knowledge Support System, Agricultural Sector Working Group, Joint Sector Review group and the research extension farmer linkages committee that favors dialogue on research with individual farmers (not necessarily the structured engagement of FBOs).

69. Social protection programmes are coordinated by the Social Protection Sector Advisory Committee (SPSAC) which are represented by MDAs, development partners and non-governmental actors engaged in delivering the social protection system. The Social Protection Technical Working Committee (SPTWC) brings together technical staff of MDAs and implementing agencies of various social protection programmes to facilitate and coordinate delivery, exchange experiences and lessons. In addition, the social protection policy identifies specific roles for MoFA that shall participate to both committee and have specific role to reduce rural poverty through agricultural interventions, advice on agricultural risk insurance, support development of integrated geographical information systems on vulnerable areas to facilitate optimal food distribution and targeted and to support basic nutrition of vulnerable groups especially children at school.
70. To ensure an effective implementation of IFAD interventions, there is the need for institutional collaboration and partnership with government agencies, development partners, private sector and civil society organizations operating in various targeted districts and the communities as well as existing platforms to ensure coordination and harmonization of interventions. In addition, there are some existing platforms to which IFAD can contribute such as the Climate Smart Agricultural platforms at the districts level and the Climate Change and Food Security (CCFS) Platform at the national level. Within the districts, there are also institutions such as the District Directorate of Agriculture (DDA), Environmental Protection Agency (EPA), Forestry Commission (FC), National Disaster Management Organization (NADMO), Community-Based Organizations (CBOs), Ghana Irrigation Development Authority (GIDA), Community Water and Sanitation Authority (CWSA), Civil Society Organizations which support climate change mitigation and adaptation actions. An effective institutional collaboration among all these stakeholders will enhance the implementation of adaptation options in the districts.

Strategic recommendations

71. This section provides the recommendations on the strategic orientation of the COSOP including the targeting strategy building on the lessons learnt from previous programmes. It covers the main lessons learned from IFAD's completed and ongoing programmes, COSOP alignment with government priorities and strategic recommendations on actions and green financing opportunities that the COSOP should take into account during its implementation period.

Lessons learned

72. **Targeting:** Most IFAD-financed projects have applied the self-targeting approach coupled with an effort to disseminate the information of the available interventions. Risks of elite capture were highlighted from the experience of NRGF. The findings call for a need to enforce the targeting of the smallholder farmers. Collaborations could be sought with the targeting mechanisms already in place with on-going projects such as the single household registry, linking with the beneficiaries of fertilizer subsidy programmes, WFP work on mapping livelihood and poverty as well as future agricultural census and statistical data efforts.
73. **Gender:** RTIMP reports that Farmer Field Forum (FFF) was an effective mechanism to mainstream women's participation by organizing a gender-specific group. IFAD has also encountered strong success with the gender household methodology in several African countries. NRGF also applied a direct targeting by selecting a value chain which intensively engaged women. As a result, 5.9 times more women received capacity building trainings than the original target. There exists an

opportunity for IFAD funded projects to coordinate with other donor funded projects related to gender. For example, Modernizing Agriculture Ghana (MAG), funded by Global Affairs Canada has supported the drafting of the Gender Action Plans for 10 regions of Ghana in September 2018.

74. **Youth:** The outreach of IFAD funded projects in Ghana to youth in the past is rather limited. The 2016 Participatory Outcome Assessment of NRGPs reports that as many as 21 per cent of youth beneficiaries in the sample had a "bad" or "very bad" impression of NRGPs, mainly because they felt they had been "ignored". Reflecting the lessons, 50% of GASIP's beneficiary is set as youth who are in the age between 15 years old and 34 years old. Additional Financing for REP, granted in 2018 put emphasis to address the youth unemployment in Ghana and established Youth Business Investment Fund to finance youth-led projects.
75. **Climate Change:** Promoting a Value Chain Approach to Climate Change Adaptation Project (ProVACCA) contributed a several scientific research findings related to building the climate change resilience. The baseline study showed that: a) Most farmers in the value chain had already heard about climate change although few were implementing climate resilient techniques; b) The main barriers to small scale farmers adopting climate smart agriculture included a lack of knowledge, inadequate technical support, poor access to inputs and credit and unfavourable market structure; c) At the some of the districts, climate change had been identified as a key developmental challenge but the District Medium Term Development Plans did not integrate climate change into their development agenda; and d) Rainfall patterns over a 30 year period had been shown a high degree of variability in when the start and end of the rains occurred, the length of the rainy season and increases in minimum and maximum temperatures. The project also contributed to build the scientific knowledge surrounding climate smart agricultural innovations.
76. **Nutrition:** RTIMP took various initiatives to improve food safety and nutrition, including improved production quality control processes and the production of protein and vitamin A-fortified gari, particularly in the GPCs. To improve the status of nutrition in rural Ghana, interventions are necessary to stimulate demand for high-nutrition-added products (e.g. HQCF, fortified soy-gari). The experience from RTIMP reveals the consumption remained limited and the programme missed the opportunity to largely change the malnutrition situation in the rural areas.

Strategic orientation

77. This COSOP aligns with UNSDP, MTNDPF as well as the Government's three development authorities; namely, Savannah Development Authority, Coastal Development Authority and Middle Belt Development Authority. As part of its overall development strategy, these authorities are established with a long-term endeavour (2010-2030) to align economic and developmental progress between the south and north, with the aim of attracting investments for the country's growth.
78. The COSOP will contribute to the achievement of Ghana's National Climate Change Policy (NCCP) and its Action Programme for Implementation: 2015–2020 and a National Climate Change Adaptation Strategy (NCCAS) to tackle climate change risks in the country. The NCCAS seeks to ensure a consistent, comprehensive and targeted approach to increasing climate resilience and decrease vulnerability of the populace.
79. This COSOP is strategically aligned with Ghana's Nationally Determined Contributions (GH-NDCs). GH-NDCs provide policy direction for government's intervention on mitigation and adaptation actions. COSOP is aligned with the 20 mitigation and 11 adaptation programmes of actions in the economic sectors are proposed for implementation in the 10-year period (2020-2030).

Strategic actions and targeting

80. **Geographical targeting towards the north.** Although climate change vulnerabilities cut across the entire country, the five northern regions continue to be more vulnerable to the impacts of climate change than the southern part of the country due to the combination of climatic and non-climatic stressors. These include long dry-spells, frequent flooding, bush fires, pest and diseases, erratic rainfall and rising temperatures as the main climatic stressors prevalent in the area. Poverty and out-migration of the youth are non-climatic stressors exacerbating the climatic vulnerability of the Northern Ghana. The majority of the population in Northern Ghana lives in abject poverty and their livelihoods revolve around rain-fed subsistence agriculture. Gender disparity continues to be a significant contributing factor to rural poverty in Ghana and the northern regions in particular.
81. Specific attention could be required to better capture specific poverty and vulnerability issues of **nomadic pastoralists and migrants** who are confronted with increasing limitations related to pastures and water scarcity, and with rising tensions with local farmers.
82. Various livelihood studies have shown the diversity of livelihood strategies and constraints among the poor and the vulnerable. The poorest small-scale farmers and vulnerable rural households (20%) tended to embark on a series of non-agricultural or agricultural (non-farm) economic activities to survive and generate sufficient income, and they have considered going to farming only if they could earn enough income to be able to save money and due to the existence of insurance mechanisms as they cannot easily recover from shocks. Therefore, interventions may also need to support these producers' agricultural as well their non-agricultural livelihood strategies (including food processing, trading etc.). Any interventions to support agriculture will be undertaken in close association with safety net programmes (such as LEAP) and risk assurance mechanisms (weather index insurance, guarantee funds etc.).
83. **Green financing:** there are several environment and climate-financing mechanisms available to support climate action in developing countries, such as Adaptation Funds, the Global Environment Facility and the Green Climate Fund. IFAD can explore these funding opportunities to scale up smallholder agriculture programmes in order to address issues related to poverty reduction, sustainable ecosystem management, climate change adaptation and mitigation especially for the lower capacity and climate vulnerable communities in Ghana by providing tailored funding windows for small-scale farmers and private sector operators. The Green Climate Fund and adaptation fund for instance, support agriculture projects and programmes that have emission reduction potential and demonstrate national ownership, contribute to sustainable development, promote synergies, meet the fiduciary principles and standards and gender sensitive. The country could also explore opportunities to work with the CIF.
84. Table 4 below presents the strategic actions and recommendations, targeting and geographical focus of IFAD interventions.

Table 3: Strategic actions and targeting

Thematic Area	Strategic action/recommendation	Target group	Geographical focus
Climate resilience	Invest and promote climate smart agriculture among smallholder farmers	Women, people with disabilities, youth & migrants	Five regions in the North ⁷²
	Scale up agricultural Insurance to support farmers	Women, youth, traditional smallholder farmers	Five regions in the North and Bono-East Region
	Enhance early warning systems and climate information services to enhance disaster preparedness (such as against flood) in rural communities for effective response	NADMO, G-MET, Flood prone rural communities	Five regions in the North
	Access to weather information and early warning systems for agriculture	Rural communities	Country-wide
	Promote a more comprehensive country-wide scenario projection of climate change for reliable, accurate and accessible climate data and information	Ghana Meteorological agency, EPA & smallholder farmers	Country-wide
	Technical training for agricultural extension officers to effectively provide technical and extension support to farmers and educate them on climate change adaption strategies.	Agricultural extension officers	Five regions in the North and Bono-East Region
Irrigation	Provision and maintenance of small-scale irrigation dams in communities with poor access to water for agriculture purposes	Women and youth	Five regions of the North
	Capacity building in managing irrigation schemes and ensuring sustainable and efficient utilization of water for farming activities	Rural communities	Five regions of the North and Bono-East Region
Youth	Support Youth in Agriculture and creation of employment opportunity	Youth	Country-wide
Gender	Build capacity of more women in every stage in the agriculture value chain especially in rural enterprises (agro processing, storage & market techniques)	Women and girls	Nation-wide
Gender and youth	Financial supports targeting youth and gender	Women, vulnerable groups and youth	Five regions of the North and Bono-East Region
Value chains	Agriculture value chain improvement (Cocoa, Cashew, Tomatoes, Maize	Among women agro processors and youth	Five regions of the North and Bono-East Region
Indigenous knowledge	Invest and utilize indigenous knowledge for appropriate climate change adaptation	Indigenous communities and rural areas	Indigenous and rural communities across the country
Nutrition	Build capacity of families towards child nutrition and dietary management	Children, women, community nutritionists & child caretakers	Five regions in the North
Land issues	Strengthen understanding and create opportunities for land access and utilization among vulnerable groups	Women, men, people with disabilities &	Five regions in the North

⁷² Upper East, Upper West, Northern, North East, and Savanna region.

		traditional authorities	
Livestock	Invest in additional livelihood diversification including livestock rearing, grass cutter farming, beekeeping etc.	Youth, women and people with disabilities	Five regions in the North
Food security Data	Support country wide assessment of poverty, for instance in collaboration with MoFA and WFP vulnerability assessment as well as LSMS survey so as to better identify the different categories of rural poor and improve targeting	MoFA and WFP	Nation-wide with focussed qualitative assessment in regions covered by IFAD interventions

85. **Monitoring.** Implementation of the COSOP will be monitored using several instruments, including:

- COSOP Results Management Framework and Logical Framework of each project;
- COSOP Result Review in 2021 and COSOP Completion Review in 2024;
- Supervision and implementation supports and other mission reports through on-going projects; and
- Annual outcome surveys will be leveraged to obtain information concerning COSOP.

86. A bottom-up participatory monitoring approach will be used to monitor the programme activities. IFAD will continue to elicit the support of programme beneficiaries in assessing their needs, building consensus on addressing these needs, and using positive feedback to facilitate buy-in and ownership of solutions developed, all worked to engender sustainability of the programme activities. In addition, IFAD could seek to engage FBOs in a more structured way along program cycle, including FONG which IFAD partner in programs supporting national and regional FBOs⁷³.

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COSOP preparation process

- The Ghana Country Office started operations in 2011. The last Country Strategic Opportunities Programme of IFAD in Ghana was in effect for the period of 2013-2018. The following table summarises the alignment of COSOP with the government of Ghana's national plans, sector strategies and the agricultural investment plans.

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
National Plans		GPRS II			GSGDA I			GSGDA II			LTNDP -->2057									
Sector Strategies	2002-- FASDEP I				FASDEP II															
Ag Investment Plan							METASIP			METASIP II										
Planning for Food and Jobs														PFJ						
IFAD COSOPs	Previous COSOP						COSOP 2013-2018													
IFAD PBAS Cycles							IFAD 8 \$40.5m		IFAD 9 \$38.0m		IFAD 10 \$44.0m		IFAD 11 \$?m							
IFAD Projects	RTIMP/PROVACCA (US\$ 21.5 million)		NRGP (US\$ 22.3 million)		RAFiP (US\$ 11.5 million)		REP (US\$ 71.5 million)						GASIP (US\$ 81.6 million)							

COSOP design process

- This process, launched in February 2019, was structured in five phases: (i) in-country consultation and desk review including the review of Ghana's strategic documents and stakeholder consultations; (ii) design workshop and draft COSOP presentation; (iii) IFAD internal review; (iv) COSOP endorsement meeting by the national stakeholders; and (v) approval of COSOP by the IFAD Board of Directors.

Consultation process in Ghana

In-country consultations and desk review

- As a part of the COSOP consultation in Ghana, the Ghana IFAD Country Office (ICO) conducted a series of bilateral meetings with development partners and Government of Ghana stakeholders. The Ministry of Agriculture has also been formulating the Ghana Agricultural Investment Plan for the period from 2018 to 2021, validated by key stakeholders during the preparation of this COSOP. Ghana ICO staff participated in the validation workshop, and stakeholder dialogues engaging the government of Ghana, financial institutions, beneficiaries and the development partners.

Strategic Objectives consultation workshop

- Followed by the bilateral meetings and the desktop reviews, a COSOP design workshop was held on April 4th 2019, inviting 56 stakeholders from the public, private and non-governmental sectors as well as representatives of the beneficiaries of IFAD-financed programmes in Ghana. The objective of the design workshop was to consult and formulate the strategic objectives of the new COSOP.

Draft COSOP presentation and other consultations

- On May 2nd, 2019, the draft COSOP design was presented to all key stakeholders, including Government Ministries and Departments' representatives, and comments were received to finalize the draft in Ghana prior to the submission to IFAD HQ in

Rome. Bilateral meetings were held as well at ministerial level with MoFA and MoTI. Comments were received as well and incorporated.

IFAD internal reviews

6. The following reviews took place prior to obtaining the final approval of new COSOP covering the period from 2019 to 2024 from the Executive Board of IFAD.
 - Operational Strategy and Policy Guidance Committee (June 20th, 2019)
 - In-Country Endorsement (June, 2019)
 - Presentation of COSOP to IFAD Board members – informal seminar (August, 2019)
 - Presentation of COSOP to the IFAD Board of Directors (December 11th, 2019)

Strategic partnerships

Partnering Functions	Partners/Networks/ Platforms	Specific Results and Outcomes from Partnership	Thematic focus of the partnership	Justification for Partnership	Monitoring and Reporting (to be completed for COSOP Results Review & CCR)
Mobilizing co-financing	Government	Mobilization of funding for national strategies in agriculture and rural development	rural finance, cocoa, livestock, REP, GASIP	Key partner	
	AFDB	Co-financing other potential programmes	Rural finance, cocoa, REP	Partner of government	
	World Bank	Co-financing other potential programmes	Cashew, cocoa	Partner of government	
	European Union/ Agence Française de Développement	Co-financing other potential programmes	Rural finance	Partner of government	
	OFID	Co-financing other potential programmes	GASIP	Longstanding partner of IFAD	
	Kreditanstalt Für Wiederaufbau (KfW)	Alignment with IFAD's funded projects	Rural finance	Partner of government	
Strengthening private sector engagement	Private Enterprise Foundation	Facilitation with the private sector engagement	All	Represents range of private-sector associations and recognized for its leadership and advocacy in Ghana	
	ARB Apex Bank	Representation of Rural Community Banks to invest in agriculture	REP, Rural Finance	Apex body of the rural community banks in Ghana	
	Ghana Microfinance Network (GHAMFIN)	Representation of Microfinance institutions in Ghana	Rural Finance	Apex body of the microfinance institutions in Ghana	
	ABC Fund	Identification of investable opportunities/missing middle financing	REP	ABC fund is structured by IFAD	
	GRATIS Foundation	Promotion of innovation and technologies through private sector engagement	REP	Implementing partner of REP	
	NBSSI	Advisory service and incubation of MSMEs	REP	Implementing partner of REP	
	Ghana Agricultural Insurance Pool	De-risking of investment in agriculture through agricultural insurance	Rural finance	IFAD is looking for a partner in this field to de-risk the investment in agriculture	
Engaging in policy and influencing development agendas	ASWG: Agricultural Sector Working Group	Engage in policy dialogue and agenda setting of agriculture in Ghana IFAD to co-chair ASWG for the second half of 2019- 2020 with Dutch	GASIP	Key development partners are all involved along with the government to discuss the latest policy agenda	
	PSWG: Private Sector Working Group	Engage in policy dialogue and agenda setting of the private sector development in Ghana	REP	Key development partners are all involved along with the government to discuss the latest policy agenda	
	UNCT	Engage in policy dialogue and agenda setting of achieving SDGs relevant to IFAD	All	UNCT aims to coordinate in country UN agencies to jointly achieve SDGs in Ghana	

	Tony Blair Institute for Global Change	Engage in policy dialogue & promotion of investment in agriculture		Regional partner of IFAD	
Enabling coordinated country-led processes	ASWG: Agricultural Sector Working Group	Coordinated implementation and monitoring will be enabled working through METSS ⁷⁴ , funded by USAID	GASIP	Key platform for coordinating agriculture related donor activities. Strong MoFA support and engagement	
	PSWG: Private Sector Working Group	Coordinated implementation and monitoring will be enabled	REP	Key platform for coordinating agriculture/private sector related donor activities. Strong MoTI support and engagement	
	UNCT	Achievement of Outcome 1 and Outcome 6 of UNSDP ⁷⁵	All	In collaboration with government, one UN country team works to achieve UNSDP	
	Rome Based Agencies	Coordinated project implementation and monitoring	All	FAO Ghana is implementing partner of GASIP's ASAP component	
Developing and Brokering Knowledge and Innovation	ASWG: Agricultural Sector Working Group	Strengthen sharing of knowledge and good practices	All	Key development partners and government are all involved to share knowledge	
	RBA Collaboration	Strengthen knowledge sharing initiatives with FAO and WFP SSTC strategic partnership with FAO and FAO RAF (See Appendix VII)	FAO: Knowledge sharing of the sustainability of cocoa production in Ghana ⁷⁶ WFP: Knowledge sharing and TOT of post-harvest loss related matters <i>Food Security Assessment / baseline study of SDG 2.</i>	RBAs mandated to achieve SDG 1 and SDG 2	
	IFPRI/Innovation Poverty Action	Strengthen innovation through evidence based intervention	Impact assessment	Third party research institution to provide evaluation objectively	
	Brazil Africa Institute	Promotion of innovative technology and good agriculture practice with a focus on youth	All	Strategic partner of IFAD (global) SSTC	
	SHEP and KAIZEN (JICA)	Strengthen knowledge sharing on programme interventions	All	On-going partnership with NBSSI to implement KAIZEN activities	
	AGRA	Strengthen knowledge sharing on programme interventions	All	Collaboration through Partnership for inclusive agricultural transformation in Africa Shareholder of ABC Fund	
	Global Forum for Rural Advisory	Strengthen knowledge sharing of extension	All	IFAD has been a founding partner of	

⁷⁴ Monitoring, Evaluation and Technical Support Service

⁷⁵ UN Sustainable Development Partnership

	Services (GFRAS)/Ghana Forum for Agricultural Advisory Services (GFAAS)	and rural advisory services to empower farmers		GFRAS. GFRAS has a country Forum called GFAAS which is undertakes activities with support from the Global Forum and development partners.	
	Gesellschaft für Internationale Zusammenarbeit (GIZ)	Promotion of renewable energy and value chain development	All	Government partner in promoting renewable energy and value chain development at districts	
Enhancing Visibility	ASWG: Agricultural Sector Working Group	IFAD ensures that its work is aligned and visible	GASIP	Key development partners and government are all involved	
	PSWG: Private Sector Working Group	IFAD ensures that its work is aligned and visible	REP	Key development partners and government are all involved	
	African Green Revolution Forum (AGRF) 2019	IFAD president to participate in the event	All	Leading platform for African Agriculture to bring together a range of stakeholders	
	World Foods Day	Joint publication (RBA/UNCT) to address the importance of food security in Ghana	All	Annual event to address food security	

South-south and Triangular Cooperation strategy

Introduction

1. South-South and Triangular Cooperation (SSTC) is an ever more integral component of IFAD's overall operating model, complementing other existing tools and instruments for pursuing the Fund's mandate. SSTC activities are anchored in IFAD's Strategic Framework 2016-2025 and COSOPs, and guided by commitments made within the Fund's governing bodies (e.g. in the context of replenishment consultations). On the one hand, by implementing the approach, IFAD is well-positioned to better leverage, promote and bring to greater scale a number of the traditional SSTC interventions and innovations that have been recognized as particularly successful development tools. On the other hand, by piloting new instruments and partnerships in the areas of technical cooperation and investment promotion, IFAD seeks to raise its level of ambition for harnessing SSTC as an instrument for improving the livelihoods of rural people and their organizations. These activities are fully supportive of, and complementary to, the Fund's development objectives outlined in the Strategic Framework 2016-2025.
2. In line with the IFAD SSTC Strategy, the SSTC dimension for Ghana in this COSOP period from 2019 to 2024 will entail a range of complementary and coordinated activities undertaken by a core team from MOFA, FAO and IFAD that will contribute to the performance of the COSOP. SSTC will in the context of this COSOP be effectively used as a key means to deliver capacity building, resources mobilization, technology transfer to the benefit of Ghana, and within the context of the broader IFAD-financed programme. In addition, a well-coordinated mechanism SSTC for Ghana would further attract other countries that wish to partner with Ghana to achieve food security, poverty reduction and the sustainable development of natural resources. This is fully in line with the international 2030 Agenda for Sustainable Development and Ghana's national development objectives.

Opportunities for rural development investment promotion and technical exchanges in Ghana

3. In Ghana, specifically, this COSOP proposes a strategic partnership with FAO and MOFA in the area of SSTC which focuses on support for relevant training and capacity building for GoG staff in partner countries of the South and North. These can build on existing partnerships for SSTC developed by FAO and IFAD with, for example, FAO-China Trust Fund, IFAD-China SSTC fund, Morocco, Korea, Brazil, Egypt, Israel, Japan, Germany, Italy, Spain, the UK, France, AfDB and the World Bank among others.

SSTC engagement rationale of IFAD in Ghana

4. Developing countries are increasingly interested in learning from the successes and practical lessons from experience of their peers. IFAD, being a specialized agency of the United Nations as well as an International Financial Institution, engages in SSTC to contribute towards enhancing development effectiveness not only brokering the knowledge and technical cooperation but also by catalysing investments between developing countries.
5. SSTC will be undertaken in a strategic partnership with other RBAs based in Ghana, informed by the MOU signed between IFAD, FAO and WFP in June 2018, which underlines the importance of collaboration to achieve SDG 2: No Hunger, particularly through reciprocal exchange of expertise and mutual engagement to achieve the SDGs in the context of the UN Sustainable development Partnership in Ghana. Areas for SSTC to highlight in the strategy for Ghana include: exchange of knowledge with neighbouring countries; skills, resources and technical know-how on smallholder agriculture and rural development including innovative and tested

solutions on the development of key agricultural value chains (e.g. focus value chains of the GASIP, particularly rice and cassava to start with the possibility of extending to activities related to maize, sorghum, vegetables and possibly cocoa and livestock).

Identified partnerships and initiatives for SSTC in Ghana

6. Specific activities will include support for the development of SSTC a national south-south and triangular cooperation strategy and a coordination mechanism at MOFA, to support the agriculture sector, the implementation of the COSOP. The aim of the strategy will be to allow GoG to identify partners and set up a coordination mechanism for SSTC, as well as to earmark resources, either through South-South grants or triangular partnerships with donors as well. A functional SSTC Unit could be established in MOFA with one or more SSTC officer(s) based in the Ministry. These could work with the relevant IFAD and FAO staff based in Ghana to identify key opportunities for mutual learning, exchange of experience, rural innovation (e.g. training and technology transfer), visits, workshops and training with third country partners
7. Funding for these activities will be sought from the dedicated RBA trust funds and participating countries to identify and implement a programme of relevant SSTC activities.

Conclusion

8. This SSTC cooperation strategy for Ghana will be discussed and developed in consultation with GoG during the validation, approval and initial implementation processes related to this COSOP.

Country at a glance

	1995	2000	2010	2017
World View				
Population, total (millions)	14.63	18.94	24.51	28.83
Population growth (annual %)	2.7	2.5	2.5	2.2
Surface area (sq. km) (thousands)	238.5	238.5	238.5	238.5
Population density (people per sq. km of land area)	64.3	83.2	107.7	126.7
Poverty headcount ratio at national poverty lines (% of population)	-	-	24.2	-
Poverty headcount ratio at \$1.90 a day (2011 PPP) (% of population)	49.8	35.7	12.0	-
GNI, Atlas method (current US\$) (billions)	5.85	6.47	30.54	54.18
GNI per capita, Atlas method (current US\$)	400	340	1,250	1,880
GNI, PPP (current international \$)	17.80	32.91	72.26	123.51
GNI per capita, PPP (current international \$)	1,220	1,740	2,950	4,280
People				
Income share held by lowest 20%	6.6	5.8	5.4	-
Life expectancy at birth, total (years)	57	57	61	63
Fertility rate, total (births per woman)	5.6	4.8	4.3	4.0
Adolescent fertility rate (Births per 1,000 women ages 15-19)	110	84	73	68
Contraceptive prevalence, any methods (% of women ages 15-49)	17	22	35	33
Births attended by skilled health staff (% of total)	40	44	67	71
Mortality rate, under-5 (per 1,000 live births)	127	99	72	49
Prevalence of underweight, weight for age (% of children under 5)	24.8	20.3	13.4	11.0
Immunization, measles (% of children ages 12-23 months)	61	90	93	95
Primary completion rate, total (% of relevant age group)	66	72	89	95
Primary (% gross) school enrolment	71.6	86.2	104.3	104.8
Secondary (% gross) school enrolment	36	36	56	70
Gender parity index (GPI)	1	1	1	1
Prevalence of HIV, total (% of population ages 15-49)	1.1	2.6	2.0	1.7
Environment				
Forest area (sq. km) (thousands)	86.3	89.1	92.0	93.7
Terrestrial and marine protected areas (% of total territorial area)	-	-	-	7.8
Annual freshwater withdrawals, total (% of internal resources)	-	3.2	-	-
Urban population growth (annual %)	4.7	4.2	3.9	3.4
Energy use (kg of oil equivalent per a capita)	362	331	302	335
CO2 Emissions (metric tons per capita)	0.26	0.33	0.41	0.54
Electric power consumption (kWh per capita)	327	332	281	355
Economy				
GDP (current US\$) billions	5.89	4.98	32.17	59.00
GDP growth (annual %)	3.3	3.7	7.9	8.1
Inflation, GDP deflator (annual %)	31.2	27.2	16.6	10.4
Agriculture, forestry and fishing value added (% of GDP)	45	35	28	20
Industry (including construction) value added (% of GDP)	17	25	18	31
Exports of goods and services (% of GDP)	17	49	29	35
Imports of goods and services (% of GDP)	26	67	46	38

Gross Capital Formation (% of GDP)	14	24	13	22
Revenue, excluding grants (% of GDP)	-	-	17.5	-
Net lending (+)/net borrowing (-) (% of GDP)	-	-	-7.1	-
States and markets				
Time required to start a business (days)	-	21	11	14
Domestic credit provided by financial sector (% GDP)	17.5	39.3	28.4	24.5
Tax revenue (% of GDP)	-	-	13.7	0
Military Expenditure (% of GDP)	0.4	1	0.4	0.4
Mobile cellular subscription (per 100 people)	0	0.7	71.1	127.5
Individuals using the internet (% of population)	0.0	0.2	7.8	34.7
High-technology exports (% of manufactured exports)	2	2	2	4
Statistical Capacity Score (overall average)	-	-	66	69
Global Links				
Merchandise trade (% of GDP)	36	93	59	44
Net barter terms of trade index (2000=100)	100	100	186	182
External debt stocks, total (DOD, current US\$ million)	3,881	6,743	9,110	22,022
Total debt service (% of exports of goods, services and primary income)	38.8	19.0	4.0	10.4
Net migration (thousands)	-16	166	-50	-100
Personal remittances received (Current US\$) (millions)	6	32	136	3,536
Foreign direct investment, net inflows (BoP, current US\$) millions	15	166	2,527	3,225
Net official development assistance received (current US\$) millions	559.7	600.7	1,697.2	1,256.7

Financial management issues summary

Fiduciary Inherent Risk:	MEDIUM	<p>Overall the inherent risk is medium. Ghana was ranked 78st out of 180 countries in the 2018 TI Corruption Perception Index, with a medium score of 41. The 2018 RSP score of 4.80 is also in the medium risk bracket. S&P sovereign rating for Ghana is B. Ghana portfolio consists of two ongoing projects with a cumulative disbursement rate of 32%. The portfolio is showing a moderately satisfactory FM performance (one project is rated 3 and one 4). The share of agriculture in the GDP declined to 18.9% in 2016 from 31.2% in 2005. In 2015, Ghana achieved the Millennium Development Goal (MDG) 1: to halve the proportion of people living in extreme poverty.</p> <p>The main strength of Ghana's PFM system derives from its solid legal and institutional setting, accompanied by a skilled and well-led civil service. The structure is robust, the key PFM institutions are the main pillars that provide solid guidance and leadership to Ministries that deliver the public goods and services that Ghana needs as a pre-requisite for socio-economic development. Ghana is a lower middle-income country, with strong PFM playing a major role in achieving this status. Ghana's PFM could be improved as some aspects of it pose a degree of fiscal and fiduciary risks; main weaknesses include:</p> <ul style="list-style-type: none"> - the long term financial sustainability of state-owned enterprises. This poses a threat to the GoG budget because of their need for funding that ultimately becomes an obligation of GoG to cover. - Extra-budgetary operations that negatively impact on budgetary outcomes. About 20 percent of budgetary funds are spent in this non-transparent manner⁷⁷.
Disbursement - Profile	Moderately Unsatisfactory	
Disbursement Ratio ⁷⁸ as at May 2019	13.1%	
Pending Obligations	Currently there are no ineligible expenditures	
Counterpart Funding - Profile	Moderately Unsatisfactory	
IFAD Performance-Based Allocation System (PBAS) –	IFAD 11	
2019 Lending Terms	Transitioning to blend from highly concessional	
PBAS (IFAD 11 allocation)	US\$ 46 million	
Debt Distress	High risk of debt distress	<p>The overall risk rating of debt distress is assessed to be high. The external risk of debt distress is assessed to be high because of the breaches of two IMF indicators (external debt service-to-exports and external debt service-to-revenue). At the same time, key challenges remain. External and domestic pressures during 2018 have been a reminder that, Ghana remains precariously exposed to investors' sentiment. Public debt is still elevated. The clean-up of the financial sector is not yet complete and, along with loss-making state-owned enterprises in the energy sector, poses large fiscal risk. Given Ghana's legacy of political budget cycles, the 2020 elections will represent a key test of the authorities' commitment to macroeconomic discipline and reform demonstrated so far⁷⁹.</p>

PORTFOLIO, FM RISK and PERFORMANCE

⁷⁷ PEFA 2018.

⁷⁸ Disbursement RATIO = DISBURSEMENT (12 months period)/ DISBURSABLE (available at beginning of the period).

⁷⁹ <https://www.imf.org/en/Publications/CR/Issues/2019/04/05/Ghana-Seventh-and-Eighth-Reviews-Under-the-Extended-Credit-Facility-Arrangement-and-Request-46737>.

APPROVED AMOUNTS (PBAS)

USD million (4)	2013 - 2015 (IFAD9)	2016 - 2018 (IFAD10)	2019 - 2021 (IFAD11)	Notes
PBAS allocation	37.95	40.00	46.05	
Amount approved	46.60	40.00	0.00	

(4) Source = GRIPS.

DISBURSEMENTS BY FINANCING SOURCE

USD million equivalent disbursed during the period (5)	2013 - 2015 (IFAD9)	2016 - 2018 (IFAD10)	2019 - 2021 (IFAD11)	Cumulative undisbursed balance (6)
SUPP	1.81	2.38	0.00	0.00
ASAP	0.80	2.31	0.07	5.83

Project	Financing Instrument	Curr.	Amount (million)	Project risk rating	PSR quality of FM	PSR audit	PSR disb. Rate	Disbursed to approved
REP	2000002131	XDR	28.35	Low	Mod. satisfactory	Mod. satisfactory	Mod. satisfactory	8 %
	L-I--841-	XDR	19.70	Low	Mod. satisfactory	Mod. satisfactory	Mod. satisfactory	84 %
GASIP	2000000646	XDR	23.70	Medium	Mod. unsatisfactory	Mod. satisfactory	Unsatisfactory	15 %
	2000000647	XDR	6.50	Medium	Mod. unsatisfactory	Mod. satisfactory	Unsatisfactory	35 %

Project	Financing instrument	FLX Status (1)	Lending Terms	Currency	Amount (million)	Completion date
REP	200000213100	DSBL	HIGHLY CONCESSIONAL TERMS 0.75 pc	XDR	28.35	30/03/2022
	L-I--841-	DSBL	HIGHLY CONCESSIONAL TERMS 0.75 pc	XDR	19.70	30/03/2022
GASIP	200000064600	DSBL	HIGHLY CONCESSIONAL TERMS 0.75 pc	XDR	23.70	29/06/2021
	200000064700	DSBL	ASAP GRANTS	XDR	6.50	29/06/2021

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

1. REP: the latest two supervisions have taken place in May 2019 and December 2018. They have both assessed the fiduciary risk as low. The PCMU is properly staffed. Dedicated accounting software- iSCALA is installed and performing well. Internal Controls are adequate with oversight by the lead implementing ministry. Areas in need of further improvement include fuel management. For the External Audit, REP has traditionally met their statutory obligations of submitting audit report on time without major issues reported. No major challenges were encounter regarding the Accounting procedures.
2. GASIP: the latest supervision held in February 2019 assessed the fiduciary risk as medium. The areas in need of substantial improvements are Organization and Staffing, where the absence of a full time deputed Finance Manager is a concern, undermining the quality of the internal control system, asset and contract management; currently the position is in the process of being filled. The project does not have a proper internal auditor but is regularly visited by the internal audit unit of the MoFA, however, the quality of the internal audit reports prepared is not satisfactory. The areas in which the project performs well are Funds flow and accounting/reporting, in fact the project uses a good accounting software which is able to generate reports and WAs. For the External Audit, the 2017 Audit was submitted on time. Quality of the audit work was acceptable. The 2018 audit exercise is ongoing.

Procurement risk assessment

1. Procurement reforms in Ghana have progressed well over the past few years, but the procurement system still has several weaknesses and bottlenecks which need to be addressed. The major bottlenecks include: limited procurement planning; weak procurement capacity in the public and private sectors; a non-existent reference price data- base for infrastructure; low private sector confidence in public procurement resulting in low participation in public bids; perceived existence of fraud and corruption in the procurement process; and dysfunctional procurement units in many procuring entities. However, the Government is committed to addressing these weaknesses. Furthermore, through the e- Transform Project (a World Bank funded Project), the Government will take measures to automate procurement implementation processes and approvals, and link the procurement processes planning and implementation to budget planning, to reduce human errors and influences as well as to improve the transparency and fairness of the process, while ensuring value for money and increasing private sector confidence in the public procurement process.
2. The recent Public Expenditure and Financial Accountability (PEFA) Performance Assessment Report and World Bank assessments confirm that the existing country procurement systems - legal and policy framework – as well as the capacity in terms of numbers, experience and proficiency - give reasonable assurance that donor investments will be used appropriately to achieve the intended purpose. The Procurement Act, 2003 (Act 663) was amended through the Public Procurement (Amendment) Act 2016, Act 914 which became effective July 1, 2016. The amendments brought in number of procurement reforms which clearly demonstrates the country's commitment to ensure accountability for the public funds. It is also noted that the Public Financial Management Act 2016, (Act 921) was passed in the same year. The country procurement systems are consistent with the core procurement principles of efficiency, transparency, effectiveness, fairness, value for money, integrity, fit for purpose, accountability and the appropriate competition. The Ghana Public Procurement Authority (PPA), which is an agency under the Ministry of Finance, is the regulator of the Law. The PPA therefore must ensure that there is strict compliance to the law and maintenance as well as the enhancement and monitoring of the capacity in place.
3. **Procurement monitoring.** The PPA's procurement database indicates that it can be used to monitor procurement activities. The database captures at least 70 percent (by value) of public procurement, detailing the contract award, the value and the successful bidder. The PPA's website contains information about contracts awarded to contractors. These are classified according to procurement method, that is, sole-sourcing, restricted tender and open competition, and requests for quotations for lower value procurement. However, the presented data are almost two years late.
4. Ghana ranks 80 out of 180 countries in the 2017 Corruption Perception Index according to Transparency International. Nonetheless, the findings on internal and external audits, and assessment of institutions like Transparency International, indicate that integrity and ethical values still need to be strengthened. There is an overall commitment at the top to integrity and ethical values. Indeed, fighting corruption is high on the agenda for the Government of Ghana, as outlined in the 10-year National Anti-Corruption Action Plan that was approved by Parliament in 2014. The Action Plan aims to institutionalize efficiency, accountability and transparency in the public, private and not-for-profit sectors, as well as conduct effective investigations and prosecution of corrupt conduct.
5. As indicated in the PEFA Report, the procurement complaints framework meets five out of the six criteria outlined in the PEFA methodology; criterion 4 is not fully met. Sections 78 to 82 of the PPA Act 663 (as amended by PPA Act 914) outline the

procedure for complaints and administrative review. A nine-member Appeals and Complaints Board (ACB) is empanelled to receive, consider, review and adjudicate all procurement complaints — once the internal entity review process is exhausted and has proven inconclusive. Section 82 of Act 663 (as amended by Act 914) outlines the legal framework for suspending all procurement activities once the ACB receives an official complaint from a dissatisfied bidder. In practice, however, suspension of the procurement process is not always done, especially for very sensitive national issues.

6. **Frequency of procurement supervision.** In addition to the prior review supervision which will be carried out by IFAD, the procurement capacity assessment has recommended one supervision mission each year to visit the field to carry out post review of procurement actions and technical review. The procurement post reviews and technical reviews should cover at least 15 percent of contracts subject to post review. In addition, post reviews of in-country training will be conducted periodically to review the selection of institutions/facilitators/course content of training and justifications thereof and costs incurred. Post review consists of reviewing technical, financial, and procurement reports carried out by the borrower's executing agencies and / or consultants selected and hired under IFAD-financed projects and programmes according to procedures acceptable to IFAD.
7. **Procurement risks at the project level.** Despite the robust country procurement legal and policy framework, the experience from on-going projects identified the following risks: (i) capacity constraints leading to: failure to comply with procurement law; delays in processing procurement, delays in preparation of Terms of Reference (ToRs), Technical Specifications, delays in evaluations, review and clearance, weak record keeping and filing; and weak contract management, resulting in cost overruns; (ii) competing demands on staff and uncoordinated transfers; (iii) political interference resulting in conflicts of interest and poor performance of some service providers, and (iv) perception of lack of competition – weak private sector with limited competition. Based on the above analysis of the risk, the procurement risk is considered **Substantial**.
8. Key mitigation measures to address procurement capacity gaps are the following:
 - The Project Implementation Manual (PIM) should include detailed sections on procurement objectives, use of IFAD guidelines, Procurement Plan, thresholds for procurement method and prior review, procurement tasks and responsibilities, strengthening procurement capacity, procurement categories, thresholds and methods, procurement steps, contract management and expenditure reports, publications of awards and debriefing, fraud, corruption, and documentation and filing systems. The PIM is considered a living document, expected to be updated from time to time as agreed, to reflect agreed refinements to project procedures;
 - Undertake yearly procurement audits by the supreme audit institution of Ghana, while the PPA will continue to undertake its annual assessment of Municipal Assemblies on procurement;
 - Make use of the experts in specialized departments/units at national and local levels as well as draw on the support of external specialized consultants support as and when needed for Terms of Reference (ToR), preparation of Request for Proposals (RFPs), and bid evaluations;
 - Improve contract supervision and monitoring, and application of the conditions of contract to minimize poor performance of service providers.

COSOP background note: Rural finance

Country Context: Key challenges and opportunities

1. **Financial sector:** The formal banking sector is led by the Bank of Ghana (BoG). There are 29 commercial banks and a range of financial institutions, organised into 4 tiers to make financial services available to people normally excluded and unable to obtain financing from the formal banking and financial sectors. Together, the different types of institutions in the four tiers are referred to as a Specialised Deposit taking Institutions (SDI). Also, the microfinance companies, moneylending companies, and Financial Non-Governmental Organisations (FNGOs) are jointly classified as Microfinance Institutions (MFIs).
 - *Tier 1:* Rural and Community Banks (RCB:141) and Savings and Loans Companies (SLC:24);
 - *Tier 2:* 484 Microfinance Companies (MFC:484);
 - *Tier 3:* Money Lending Companies (MLC:70) and Financial NGOs (FNGOs:12); and
 - *Tier 4:* Individual money lenders and Susu collectors.
2. The BoG is the regulator of the commercial banks. The ARB Apex Bank functions as the regulator of the RCBs. The other types of financial agencies have organised their own associations. For example, the Ghana Microfinance Institutions Network (GHAMFIN) which serves as the umbrella association of the associations. Under GHAMFIN, there is Ghana Association of Microfinance Companies (GAMC), which is the national association of microfinance companies; the Ghana Association of Savings and Loans Companies (GHASALC) is the association of savings and loan companies; Microcredit Association of Ghana (MCAG) serves as the association of money lending organisations; Association of Financial Non-Governmental Organisations (ASSFIN) is the association of Financial Non-Governmental Organisations (FNGOs).
3. **Access to finance:** According to the World Bank FINDEX database, financial inclusion in Ghana has increased from 29% to 58% between 2011 and 2017 with access to finance in rural areas at 53%. However, a deeper analysis indicates that only 42% of the overall population and only 37% of the rural population has access to accounts in formal financial institutions. Only 21% of the rural population have savings accounts in a formal financial institution. This low level of financial inclusion has arisen despite the diversity of financial institutions available for addressing issues of financial inclusion and the efforts of the government to increase the outreach to rural areas.
4. Lack of access to finance is one of the key constraints to the development of the agricultural sector. In the absence of access to finance, smallholders are unable to upgrade their farms and productivity by adopting high-yielding varieties, improving farm management practices and increasing the area devoted to production.

Key challenges impending access to finance

5. **High interest rates:** The limited access to finance is driven by the unwillingness of smallholders to borrow at high interest rates (+36% and above) and unfriendly lending terms and conditions of loans from financial institutions for agricultural production. For example, collateral requirements in the form of physical assets or third party guarantees, which are difficult to arrange, the loan duration (usually under 12 months) not adjusted to fit crop maturity period and repayment conditions (usually monthly repayments in equal instalments) not adjusted by allowing moratorium or timing the repayment collection with the harvesting season. Consequently, farmers are reluctant to borrow, fearing their inability to meet the monthly repayment obligations due to irregular cash flow.

6. The high interest rates charged on agricultural production loans result from different factors (financial and non-financial alike), including non-bankable and risky smallholder business propositions, the high levels of non-performing loans in the financial sector, the high cost of refinancing funds, high operational costs in rural areas, the limited number of crop insurance products available and the lack of credit guarantee mechanisms.
7. Non-bankable and risky smallholder business propositions: The smallholder agricultural sector suffers from high production costs and output prices that do not allow for full cost recovery; smallholders are typically price-takers with very little or no bargaining power and the smallholder farmer operates in a non-competitive market space characterised by a multitude of market failures. These weaknesses combined result in very low margins and sometimes negative margins (under very highly subsidized conditions). As a consequence, financial institutions that seek to finance business propositions with sustainable reasonable returns on investments will look for profitable investment opportunities elsewhere; they will only invest in smallholder agriculture when an incentive mechanism is put in place to entice them to make loans to the perceived highly risky smallholder agricultural sector. Without an incentive scheme in place, financial institutions willing to venture into lending to smallholders will try to impute high risk premiums in the interest rates offered to smallholder farmers.
8. High levels of NPL: The financial sector suffers from very high proportion of non-performing loans (NPLs) of around 23%. Agricultural credit has a track record of poor performance and financial institutions are hesitant to increase their exposure to this sector. The commercial bank share of the total agricultural loan portfolio is only 6.1 per cent. Driven by the pressure from the regulators to reduce their NPLs, the financial institutions add high risk margins (upwards of 10%) on agricultural loans to cover their high exposure to the risks of production losses.
9. High cost of funds: The prime lending rate (also referred to as the policy rate) has reduced from over 25% to 16% over the last year. It represents the interest rate at which the apex financial institutions (BoG, ARB Apex Bank) lend funds to the intermediary financial institutions (RCBs and MFIs). The high rate of borrowing by the intermediary financial institutions is reflected on the high rate of on lending by them to smallholder farmers.
10. Absence of credit guarantee mechanism: At present the intermediary financial institutions that borrow funds from apex facilities bear the entire credit risk on rural portfolios, i.e. they are obliged to repay the apex facilities even if they fail to recover the loans from the smallholders due to production losses suffered by smallholders. The apex facility carries out the recovery on the due date through direct debit of the account of the intermediary maintained at the apex facility. There is an absence of reliable agricultural credit guarantee mechanisms that can compensate the intermediary financial institutions for the losses suffered by them due to production failure at the smallholder farmer level. The financial institutions charge high interest rates and impose physical collateral and third-party guarantees on smallholders to cope with the situation.
11. Lack of access to crop insurance: With increasing climate risks the chances of crop failure and production losses have also increased. However, the crop insurance market is at a nascent stage. Less than 10,000 farmers (not necessarily at smallholders) are covered by crop insurance. Insurance premiums are very high ranging from 5-7% making them hard to afford. The lack of awareness of smallholders and financial intermediaries about the availability and benefits of crop insurance is also a major constraint.
12. High operations costs: Many of the RCBs and MFIs are involved in group formation and village delivery of services often resulting in high operations costs ranging

between 10-15%. This is reflected in the high rates of interest offered to the smallholders.

13. Poor pricing/marketing incentives and the gap in access to warehouse facilities: In the absence of secured access to markets smallholders sell their produce in local markets immediately after harvest when the prices are low and when the smallholders' need for cash is very high to meet household consumption needs. Farmers' lack of access to secured markets and warehouse facilities are also bottlenecks to credit supply due to the apprehension that the earnings from selling the produce may not be enough to meet credit repayment obligations.
14. Other constraints to accessing to agricultural finance: In addition to the high rates of interest, there are other factors that contribute to the gap in smallholders' access to agricultural finance, including the limited understanding by financial institutions of crop production systems and the long-time taken for innovations and new financial initiatives to reach smallholders in relatively poorer geographical areas.
15. Limited understanding of agricultural production systems: RCBs and the MFIs mainly finance non-agricultural and post-harvest activities in the rural sector and have limited understanding of agricultural production cycle and value chains. Most of them lack in-house specialists for the design and implementation of agricultural loans. Consequently, specialised agricultural credit products, tailored to the seasonality of agricultural production and cash flow from the sales of the products and the application of value chain financing mechanisms are difficult to find.
16. Lengthy time taken for benefits to reach poor smallholders: Under normal conditions, the implementation of the above-mentioned initiatives can take several years before reaching poor smallholder farmers located in the relatively poorer geographical areas. The limited technical and business skills and capacities of many smallholders dilute their understanding and readiness to participate in these mechanisms. Producer associations and farmers' organisations are relatively weak and need capacity building and orientation on how to benefit from the new mechanisms. Similarly, agricultural extension services are often inadequate and not available to support smallholders to take up new technical and farm business models.

Inadequate access to finance for producers

17. Access to finance is a critical requirement but it is not the only determinants to increase the income levels of smallholders. Smallholders also need linkages to improved inputs and services (machinery services, advisory services) for optimal utilisation of the credits accessed by them. Simultaneously, their linkage to remunerative markets is important help them to fetch the best price for the improved quality and increased quantity of crop/commodity produced by them. Therefore, improved access to finance by smallholders can produce the desired economic benefits only when it is promoted within an ecosystem which also links these beneficiaries to improved inputs, services and markets. Thus, projects/programmes dealing with access to finance also have to consider the financing needs of the input supplier, service provider and the marketing partners (off-takers, processors) in order to develop effective linkages between these actors and the smallholders.

Emerging opportunities to support access to rural finance

18. In recognition of the need to stimulate agricultural GOG and its development partners have initiated several new initiatives to increase the flow of agricultural credit to smallholder farmers. Some of these are Ghana Incentive-based Risk Sharing System for Agricultural Lending (GIRSAL); Ghana Commodity Exchange (GCX) and Ghana Agricultural Insurance Pool (GAIP).

19. GIRSAL: The Bank of Ghana (BoG) has initiated GIRSAL aimed at de-risking agricultural lending and promoting investment in agriculture. GIRSAL has six pillars comprising:
- i) Guarantee fund: A 400 million GH¢ guarantee fund which will provide credit guarantees on the loans accessed by farmers from commercial banks. The guarantee fund will compensate financial institutions for any loss of portfolio up to 80%;
 - ii) Technical assistance (TA): TA is envisaged to generate the demand for GIRSAL support by developing the understanding and capacity of partnering institutions (financial intermediaries, other financial partners, farmers) to participate in GIRSAL supported initiatives.
 - iii) Agricultural insurance: Linkages to the agricultural insurance facility are envisaged to compensate producers in the event of production losses. GIRSAL will partner with the Ghana Agricultural Insurance Pool (GAIP) to enable smallholders to obtain agricultural insurance policies;
 - iv) Digital platform: A digital platform will be developed to support quicker and cheaper delivery of credit. The platform will aggregate all the operators within the agricultural sector into a digital ecosystem and will facilitate transactions between them. The system will record the details of the farms and provide information that will facilitate banks to finance production and market linkages;
 - v) rating and ranking of the banks which are involved in lending to agriculture
 - vi) the design of an incentive system to incentivize the better performing banks.
20. Ghana Commodity Exchange (GCX): The GCX has been set up as a limited liability company initiated by the Ministry of Finance. GCX operates a network of certified warehouses and silos in all regions and districts in Ghana to provide professional storage for suppliers of commodities. Each warehouse is linked to farmer cooperatives cultivating commodities traded in GCX platform. The commodities in the GCX warehouses are sold through the transfer of ownership from a farmer to a buyer. The GCX electronic warehouse receipt represents the stored commodity held in the GCX certified warehouse and are traded in the exchange. GCX and GIRSAL are expected to partner with RCBs to provide warehouse receipt financing to smallholders to smooth their incomes just after harvest.
21. GAIP: Recognising the gap in crop insurance services, the leading insurance companies in Ghana have partnered to form the Ghana Agricultural Insurance Pool (GAIP) as an arm to design and offer crop insurance products to farmers either directly or through marketing partners. GAIP provides both traditional agricultural insurance as well as index-based weather insurance products. However, its outreach is limited to less than 10,000 farmers (not necessarily smallholders) mainly due to relatively high premium ranging from 5-7%, lack of awareness of its products, the need for stronger partnerships and capacity constraints.
22. Other actors which are active and their main activities: Kreditanstalt Für Wiederaufbau (KfW) and the World Bank are two of the donor partners which are active in development finance.
23. Outgrower and Value Chain Fund (OVCF): KfW has supported the establishment of the Outgrower and Value Chain Fund (OVCF) which is a EUR 53 million fund (contributed and committed) as a refinancing facility. OVCF refinances partnering banks which in turn, on-lend to off-takers/aggregators that are contractually linked to groups of smallholders growing rubber, oil palm, rice, pineapple, cassava cocoa and maize. The current outreach is around 3,000 smallholder households. The partnering banks access OVCF at around 9% and lend to the off-takers at around an interest rate of 18%. The off-takers pre-finance the smallholders organised in groups and purchase the produce from the smallholders at harvest at a predetermined price to offset the sum pre-financed.

24. Ghana Financial Sector Development Project (GFSDP): The World Bank has approved the GFSDP, a US\$ 30 million project that aims to support the establishment of a domestic credit rating agency, design a financial data centre and develop an asset registry for traditional/physical collateral. It is also aimed to increase the outreach of RCBs and MFIs by linking Village Saving and Loans Associations (VSLAs) to the formal financial sector. It plans to upgrade ARB Apex Bank's digital platform to support the introduction of digital financial services and agent banking services. It will also support the management information systems of MFIs. Additionally, it aims to build regulatory capacity and consumer protection.
25. Development Finance Project: The World Bank has a pipeline development finance project which seeks to support the proposed Development Bank of Ghana which was announced by the Government in the 2017 budget speech. The development finance project will provide affordable lines of credit to partnering financial institutions and establish a SME guarantee fund with the objective of enabling SMEs to access affordable short term and long-term credit.

Government policies and institutional frameworks

26. *National Financial Inclusion and Development Strategy (NFIDS)*: The Ministry of Finance has developed the NFIDS which aims to increase financial inclusion from 58% to 75% by 2023. The NFIDS aims to achieve this objective through five mutually reinforcing pillars of financial sector development: financial Stability; access, quality, and usage of financial services; financial infrastructure; financial consumer protection; and financial capacity.
27. *Development bank of Ghana*: In the 2017 budget speech the Government of Ghana announced the future establishment of a development bank to finance the growth of the SME sector. The Development Banks will be regulated by the BoG and a feasibility study is currently being prepared by DFID. The development finance project of the World Bank (described earlier) is expected to support the start-up of the Development Bank.

IFAD project and programme approach and experiences with rural financing

28. IFAD co-financed projects and programmes have long experience related to rural finance in Ghana. The key experiences related to rural finance are presented below;
29. *The Northern Rural Growth Programme (NRGP)*: The NRGF introduced the cashless credit model. In this model, eligible farmers received fertilizer, seeds and services from vendors and service providers. Once the inputs and services were delivered, the rural banks make the necessary payments to providers or sellers. The model helped build relationships of trust among farmer organizations, inputs dealers, service providers, buyers and the rural bank. The cashless credit model proved less risky than providing the farmers with cash and ensured the money went into agriculture. Repayments from farmers were reported to be between 95-99%.
30. *The Rural and Agricultural Finance Program (RAFIP)*: RAFIP was implemented as a capacity building project to support RCBs and MFIs to expand their rural outreach. The programme partnered the GHAMFIN and mainly provided training and technical assistance to a range of financial institutions mainly RCBs. Unfortunately, although RAFIP identified the critical role of RCBs, the lack of clarity in the targeting strategy resulted in limited participation of RCBs with RAFIP and limited achievement of the development objectives.
31. *The Rural Enterprise Programme (REP)*: In order to promote access to finance, REP has established two funds: the rural enterprise development fund (REDF); and the Matching Grant Fund (MGF). REDF is a refinancing facility managed by the BoG. BoG disburses the REDF to end borrowers through partnering financial institutions (PFIs) based on loan agreements signed with 66 PFIs. The activities that are eligible for

REDF financing are traditional crafts, agro-processing, agro-industrial processing; farm-based activities artisanal trades, and other services, e.g. dressmaking, tailoring and hairdressing. The BoG lends to the PFIs at an interest rate of 11% which is 6% less than the policy rate of 17%. The PFIs lend to clients at an interest rate of maximum 20%, with a repayment period of one-year, third-party guarantees and physical collateral such as land, or houses. Although the REDF is considered successful, recent analysis shows that its outreach is very limited at only around 6,000 unique individuals.

32. The matching grant fund was started when REP faced the problem of low demand and disbursement of the REDF due to high rates of interest. Matching grants were expected to contribute 30% of the total project cost if a beneficiary contributes 10% of the total project cost and a bank lends 60% of the total project cost. Since the borrower must pay interest only on the bank loan (equivalent to 60% of the total financing needs), the effective interest rate on the total project cost was expected to reduce significantly.
33. *The Ghana Agricultural Sector Investment Programme (GASIP)*: The GASIP promotes access to finance through matching grants that are designed along the same lines as the matching grants in REP. A total of 30% of the total project cost was eligible for matching grant if a beneficiary contributes 10% of the total project cost and a bank lends 60% of the total project cost. The matching grants were designed to finance agricultural machinery as well as semi-public marketing infrastructure. Considering the weak performance of the matching grants, the terms were amended to allow the matching grants to finance crop production activities without compulsory contributions from bank loans.

Lessons, results and implications for current IFAD engagement

34. *Increasing the supply of finance should be linked to mechanisms that lower interest rates to create demand at the level of the borrower*: As evident in the case of the REDF when the interest rates were very high at above 36% there was limited demand for these loans and this led to disbursement problems. However, with the recent lowering of interest rates to 20%, the demand and the rate of disbursement have increased.
35. *De-risking mechanisms are needed to encourage the lowering of interest rates to smallholders*: The credit risk arising from the chances of crop failure is borne entirely by the intermediary financial institutions. To cover against the credit risk, they usually loan with high risk margins resulting in very high interest rates of more than 36% coupled with very strict repayment conditions. These factors discourage farmers from expressing interest in accessing these loans resulting in low demand. Mechanisms such as agricultural insurance for producers and credit portfolio guarantees for financial institutions can de-risk agricultural production loans and improve their outreach. De-risking that also includes capacity building on the farmer (demand) side, is expected also to enable financial institutions to lower the risk margins added to the interest rate and lower the interest rates offered to smallholder borrowers.
36. *Cost of funds and operational costs should be lowered to enable lower interest rates to the borrowers*: De-risking measures alone are not enough to lower interest rates as the high cost of borrowing by the financial institutions and the high cost of operations in rural areas are also major factors that contribute to high interest rates. Therefore, in order to lower the cost of funds for the financial institutions, their refinancing should be carried out at much lower interest rates and their average cost of funds can be lowered by enabling their access to more savings through specialised savings products. Additionally, value chain financing through aggregators and the adoption of digital tools should be promoted to lower the cost of operations and its impact on the interest rates set on the borrowers.

37. *Projects financed by matching grants are more in demand when the beneficiary share is not compulsorily linked to a bank loan:* It is evident from the experience of REP and GASIP that matching grants are less in demand when the beneficiaries are compelled to access bank loans to co-finance these projects. Once again this is because of the high interest rates which are associated with bank loans along with the transaction costs that are associated with accessing these loans. If matching grants are bundled with compulsory access to credit, then attention is required to ensure that these loans are offered at lower rates of interest.
38. *Special attention needs to be given to the supply of agricultural production loans:* IFAD co-financed projects have focused on increasing mechanization and the development of rural microenterprises. Specific attention to development and delivery of crop production loans is lacking. In the absence of crop production loans to stimulate demand, the outreach of other types of loans is limited.
39. *Access to improved and secured markets is necessary for smallholders to get more value from agricultural loans and make loan repayments:* Forced selling of produce at a low price after harvest, in order to meet the consumption needs of the family is a major bottleneck. The savings after meeting family consumption needs and loan repayment and interest repayment needs are usually too low to enable the smallholders to move out of poverty. Access to better markets through value chain linkages to cluster drivers coupled with access to warehousing facilities and warehouse receipts financing can address this challenge.
40. *Orientation and capacity building of financial institutions as well as farmers' organizations is critical to enable the flow of finance to rural areas:* Financial intermediaries have relatively limited understanding about agricultural crop production cycles and lack the capacity to design specific products and services tailored to the needs of farmers. Loan repayment schedules are not planned to coincide with cash flows generated from the sales of agricultural products generated from loan-financed investments. Consequently, some of the innovations, such as the matching grants or credit refinancing facilities supported by the development partners (such as IFAD), take a long period of time before they are taken up. Similarly, the gap in understanding and capacity to comply with the implementation requirements restricts farmers' organizations from actively participating and benefiting from these systems.
41. *Capacity building alone without directly linking the strengthened capacities to increased rural outreach does not generate good results:* As evidenced in the RAFiP project, general capacity building support to financial institutions without specific measures and plans for them to increase the rural outreach has not produced good results. Capacity building should be in the context of rural investment plans that makes financial institutions accountable to achieving a set of rural outreach results by accessing project supported capacity building inputs.

Rome-based agency (RBA) collaboration (Draft under discussion between three agencies)

Rationale for RBA collaboration in Ghana

1. Over many years, the RBAs have worked closely with the Government of Ghana (GoG) to stimulate inclusive agricultural development and rural transformation and to improve social and economic well-being in Ghana.
2. The three Rome-Based Agencies, the UN Food and Agriculture Organization (FAO), the World Food Programme (WFP) and IFAD each maintain decentralised country offices in Ghana. Ghana is also host to FAO's Regional Office for Africa, FAO-RAF, and its regional programmes across sub-Saharan Africa, including relevant thematic initiatives. IFAD maintains long partnership at project, programme and policy levels with the other RBAs in Ghana and the heads of the three offices meet periodically on an informal basis to discuss areas for collaboration.

Past and present RBA collaboration in Ghana

3. An MOU on RBA collaboration was signed between IFAD, FAO and WFP in June 2018. Building on this and further consultations at country level, the development of a note on RBA collaboration in Ghana is being discussed between the RBA offices in Ghana in 2019, to link with current country programmes, plans and priorities in the context of GoG's priorities.
4. Through its membership of the UN Country Team (UNCT) and the Agriculture Sector Working Group (ASWG), the IFAD Country Office engages with the RBAs alongside DPs and GoG representatives on policy dialogue, harmonisation, M&E and knowledge management. In addition, the RBAs have developed specific collaborations around the implementation of IFAD-financed projects and programmes in Ghana.

Obstacles to collaboration and lessons learned

5. The activities mentioned above have brought certain obstacles to RBA collaboration to light that should be considered when defining future collaboration, including:
 - Differences in mandates, albeit with interactions and potential for collaboration in certain areas.
 - Differences in implementation modalities. IFAD employs the national implementation modality, meaning that projects / programmes are implemented by the Government, whereas WFP and FAO employ direct implementation by the respective agencies, staff and partners. While the Ministry of Agriculture uses different national partners.
 - Differences in financing mechanisms. IFAD uses loans, and FAO and WFP, grants.
 - Differences in programming cycles. The IFAD COSOP covers a six-year period, while FAO's CPF and WFP's DSP cover a three-year period.
 - Staff turnover, especially of Country Directors, which could affect the dynamics of RBA collaboration.
 - Different priority intervention zones.
6. In terms of lessons learned, the RBAs recognize that success in fighting hunger, poverty and inequality in Ghana requires the development of smallholder farmers. They also recognize that despite the differences in their intervention and financing modalities, complementarity in their actions is possible. This will also require strong Government support.

Plan of Action for future RBA collaboration in Ghana

7. After successive consultations, the three agencies agreed to continue their collaboration in the following areas in the COSOP period:
 - (i) country level intervention on capacity building of GoG, knowledge sharing and policy; and
 - (ii) activities related to IFAD-financed projects.

Strategic, analytical, knowledge sharing and policy activities

8. **Support for policy dialogue and sector coordination.** This will include engaging with GoG and other development partners on policy discussions on, for example:
 - i. Strengthening FBOs to support smallholder roles and to benefit along the value chain (FAO/WFP/IFAD);
 - ii. Input subsidy policies along selected VCs, such as cocoa (FAO/IFAD);
 - iii. Financial policies, to provide better access to financial services for smallholders (FAO/IFAD);
 - iv. Facilitating discussions regarding access to land for women and youth and on management of competition over resource use between pastoralists and farmers (FAO/IFAD);
 - v. Support to the formalization of MSMEs and strengthening their roles along the different VCs (WFP/FAO/IFAD);
 - vi. Competitiveness of smallholder supply of grains to food and social protection interventions in Ghana (WFP/FAO/IFAD);
 - vii. Youth in agriculture and in rural business (building on REP experience) (FAO/IFAD).
9. **Strengthening joint learning and knowledge sharing on priority themes and initiatives for the RBAs in Ghana.** For example, building on the experience of FAO Ghana in this area, fostering knowledge sharing of the sustainability of cocoa production in Ghana⁸⁰. Building on knowledge sharing and training of trainers in the context of IFAD-financed projects and programmes (such as the GASIP) on post-harvest loss related matters (with WFP).
10. Exploring the potential to collaborate with WFP and FAO on a **joint food and nutrition security assessment** with national coverage. This will include support for the development and widening the coverage of the programme being developed and led by WFP on *Addressing the Food Security and Nutrition information gap in Ghana through a Comprehensive Food Security and Vulnerability Analysis (CFSVA)* building on the experience of WFP's Comprehensive Food Security and Vulnerability Analysis for Northern Ghana published in 2012. **A revisited nationwide CFSVA could be developed in synergy with the orientations of the IFAD COSOP 2019-24 and covering the GASIP intervention areas which is nationwide, and would then provide a useful baseline for measuring progress towards the SDGs. Additional resources for this activity would have to be mobilized by the RBAs.**
11. **South-South and Triangular Cooperation (SSTC).** SSTC will focus on the achievement of SDG 2 through reciprocal exchange of expertise and mutual engagement between Ghana and counterpart countries. In Ghana, specifically, this COSOP proposes a strategic partnership with FAO and MOFA in the area of SSTC which focuses on support for relevant training and capacity building for GoG staff in partner countries of the South and North. These can build on existing partnerships

for SSTC developed by FAO and IFAD with, for example, FAO-China Trust Fund, IFAD-China SSTC fund, Morocco, Korea, Brazil, Egypt, Israel, Japan, Germany, Italy, Spain, the UK, France, AfDB and the World Bank among others. This will be undertaken in a strategic partnership with the RBA offices based in Ghana, informed by the MOU signed between the RBAs in June 2018. Further details on the proposed strategic partnership and collaboration on SSTC, starting with IFAD and FAO RAF, can be found in Appendix VII. This underlines the importance of collaboration to achieve SDG 2: No Hunger, particularly through reciprocal exchange of expertise and mutual engagement to achieve the SDGs in the context of the UN Sustainable development Partnership in Ghana. Areas for SSTC to highlight in the strategy for Ghana include: exchange of knowledge with other agencies (including WFP) neighbouring countries; skills, resources and technical know-how on smallholder agriculture and rural development including innovative and tested solutions on the development of key agricultural value chains (e.g. focus value chains of the GASIP, particularly rice and cassava to start with the possibility of extending to activities related to maize, sorghum, vegetables and possibly cocoa and livestock).

12. **Joint publications.** For example, around the development of a joint assessment of food insecurity and nutrition in Ghana, a baseline study on SDG2, a joint RBA and UNCT Ghana publication for World Food Day on the importance of food and nutrition security in Ghana and the efforts (programmes and investments) of RBAs to address these, etc.

RBA collaboration on operational activities

13. IFAD will continue to work with other RBAs in areas where complementarity is identified to implement this COSOP and IFAD-financed projects. For example, FAO is already an implementation partner for the activities addressing climate resilience of the GASIP.
14. In the context of this COSOP, RBA collaboration will also focus on integrating nutrition into value chain development and enhancing the quality of the services provided. Here, WFP could support small and medium sized groups of farmers and MSMEs, particularly women, on milling and food safety issues relating to key food crops, such as cowpea and millet (building on past WFP efforts to train farmer groups). FAO could provide technical support drawing on policy and analysis related to nutrition issues and on translating normative guidance from FAO committees such as the Committee on World Food Security (CFS) on nutrition into advice relevant to the Ghana context.
15. The **operational activities** might be expanded to include:
 - Post-harvest losses - transport and storage, construction and maintenance of warehouses, training of extension agents; commodities exchange; training of trainers (in context of GASIP and ongoing WFP work to support storage and warehousing and the development of standard weights and measures to be used by smallholders);
 - Integration of nutrition into value chain support and development programmes (with FAO and WFP);
 - Risk-sharing facilities, strengthening rural finance and access to credit by rural people/smallholders (restructuring rural finance in the context of REP) (with FAO and WFP);
 - Fostering youth in business (e.g. Youth Business Development Fund in the context of REP) (with FAO); and
 - Integrating conservation agriculture into programmes (with FAO).

Implementation of Ghana Agricultural Sector Investment Programme (GASIP)

Implementation status

1. **Challenges.** The Ghana Agriculture Sector Investment Programme (GASIP) became effective in May 2015 and is scheduled for completion on 30 June 2021 and closure on 31 December 2021. The pace of implementation had been slow. As of 30 June 2019, disbursement rate is very low and stands 15% for IFAD loan and 34% for the Adaptation for Smallholder Agriculture Programme (ASAP) grant. Essentially, GASIP has gone through challenges related to programme management, staffing and operational related difficulties, which have delayed the programme ability to implement its activities as envisioned at design.
2. **Progress in management and staffing.** As at May 2019, the recruitment processes to fill staff vacancies was completed and the PCU has its full complement of staff at post. Most of these positions became vacant in 2018, following performance review that resulted in termination of some contracts in addition to concurrent resignations by other staff. Some positions were newly introduced; namely Value Chain Manager and Officers, which have been recruited to replace an international consultancy firm that was engaged to implement the value chain component but performed poorly; thus leading to termination of the contract. In addition, MoFA has revamped the GASIP Steering Committee and established a Technical Committee that provides ongoing guidance to the programme. The pace of implementation is picking up with the full staff complement in place and the renewed political interest shown by MoFA regarding GASIP.
3. **Progress in operations.** The programme undertook a supervision mission in February 2019, which made wide range of recommendations, including widening the scope of eligible activities that the matching grant scheme can support, notably: inclusion of production finance to encourage effective participation of resource poor smallholders in the selected value chains; increased cap of grant resources to be supported by the matching grant; and to expedite capacity building and training of FBOs using individual consultants. Efforts are also being made to align the programme with ongoing programmes, initiated by GoG; mainly, Youth in Agricultural Programme (YIAP).
4. Currently, GASIP has selected about 50 value chain clusters (about 800 FBOs) to be supported with matching grant resources and productive infrastructure facility. The instruments and tools and processes for delivering grant funds to selected beneficiaries have been developed with the PMU currently in the process of finalizing the signing of MoU/MOAs with VC drivers, FBOs and Agro-dealers to commence field implementation.
5. The implementation arrangements have been firmed up and simplified.
6. The public infrastructure component is on full swing with 16 contracts for construction of farm tracks and feeder roads, signed and work has started. The total value of these contracts amount to US\$4.5 million.
7. **Strengthening dialogue.** An implementation support workshop / mission, with the ICO in attendance, was held on 12-13 June 2019. The Ghana ICO has been in continuous dialogue with the Ministry of Food and Agriculture and ongoing operational support to the newly recruited PCU team to keep up the momentum in programme implementation.

Programme restructuring

8. The following actions have been proposed to restructure GASIP:
- **Develop actionable proposals and implementation agreements for high potential clusters out of the 45 clusters.** GASIP will aim at developing market linkages for smallholder farmers, developing capacity building programs, and actionable proposals for production input, equipment, and infrastructure grants. The basic criteria for selecting high potential cluster drivers is their willingness and capacity to develop marketing linkages with at least 500 smallholder farmers for rice, 200 farmers for cassava and 150 farmers for vegetables in the next agricultural season. This will replace lengthy impact evaluation processes that have not yielded clear results.
 - **Actionable Proposals:** GASIP will sign Actionable Proposal with FBOs and cluster drivers to enable them access matching grants to strengthen value chains.
 - **Arrangements for implementation.** Arrangements are being made to involve different MoFA departments to support implementation.
 - **Partner with the large cluster drivers and directly approach other drivers for expanding outreach.** GASIP will explore expanding the scope of collaboration with relatively larger cluster drivers who have the financial capacity to expand their outreach to adjoining areas to existing clusters supported by the programme. However, the lengthy process of selecting cluster drivers will be replaced by directly approaching agribusinesses which operate in these areas, developing implementation agreement MOUs, and actionable proposals for grant funding. This approach is justified by the fact that the private sector cluster drivers are not eligible for any financial grants from the programme and therefore their competitive selection is not mandatory.
 - **Infrastructure development.** GASIP will immediately accelerate the process of identification and implementation of productive infrastructure activities in the selected high potential clusters. Infrastructure investments will be oriented towards scaling up production and improving the product quality, such as processing plants and warehousing.
 - **Equipment financing.** The GASIP matching grant for equipment will finance up to 70% of equipment cost with a ceiling of US\$ 50,000 (increased from US\$ 30,000). The remaining 30% will be beneficiary contribution, which can be financed by the beneficiaries from savings, loans and other sources. A loan from the bank will no longer be mandatory.
 - **Financing innovative crop production kits.** GASIP will support FBOs to finance up to 70% of the innovative production packages (including inputs and mechanisation services) required by the smallholders to assure high-quality production demanded by the cluster drivers. The remaining 30% (at least) will be the beneficiaries' contribution mobilised either from own savings, bank loans or pre-financing from cluster driver.

Progress monitoring and agreed milestones

9. The following milestones are agreed to monitor the progress of GASIP:

- **Implementation support in 2018:** Extensive implementation support in 2018, based on recommendations of previous missions. A consultant was recruited to ensure implementation support. An implementation workshop was held in November 2018 to re-orient implementation. Frequent meetings were held as well with the Country Director and other ICO staff. A number of meetings were held as well with MoFA and the Minister, who expressed their support to the programme. Progress was made with regard to recruitments and evaluation of applications from first and second call for proposals.
- **Supervision mission in Feb 2019:** Based on the status of implementation and need to re-orient the programme, a supervision mission was organized in February 2019 with experts in areas that were deemed to need urgent focus. The mission made important recommendations for re-orientation and simplification.
- **Implementation support workshop (12-13 June, 2019):** an operational plan on key activities were developed and agreed with a timeline and owners.
- **Continuous implementation support.** IFAD is providing continuous implementation support, including: (i) The ICO staff and consultants are conducting daily or bi-daily interactions with the project staff, (ii) remote audio conferences were held with experts and advisors, not in Ghana, regarding special topics such the matching grants procedures and value chains topics, (iii) continuous support regarding procurement and disbursement to unlock any bottlenecks, (v) high level policy discussions with donors and MoFA to develop synergies, increase effectiveness and speed up implementation.
- **Visits by the Regional Director.** The regional director visited Ghana twice where he discussed among other things, the performance of GASIP.
- **August 2019.** An implementation support mission was undertaken.
- **October/November 2019.** A Supervision Mission will take place.
- **29 January 2020:** Portfolio Review with WCA Regional Director, Ministry of Finance and Ministry of Food and Agriculture.

Government Flagship Programmes

1. Investing for Food and Jobs is the GoG umbrella programme in agriculture, food security and rural development. Number of flagship programmes are either embedded fully or contributing to this umbrella programme.
2. The '**Planting for Food and Jobs (PFJ)**' was initiated in 2017 with the aim of stimulating food production and generating income for farmers. The Government of Ghana believes agriculture provides the best opportunity to turn around the economic fortunes of the country and change the lives of many people, especially those in rural areas. Under the PFJ, farmers are provided with improved seeds, fertilizers, dedicated extension services, marketing strategies, and access to e-agriculture technology.
3. The '**One Village, One Dam**' initiative intends to reduce farmers' dependency on weather and ensure year-round farming. The initiative is implemented in northern Ghana, to ensure availability of water for all-year farming. As part of this initiative, the government will facilitate the provision of community-owned and -managed small-scale irrigation facilities. The successful implementation of 'One Village, One Dam' will improve food security and income of farmers.
4. The '**One District, One Factory**' (1D1F) aims to establish at least one medium-to-large-scale industrial enterprise in all through public-private partnerships (PPPs) to address the challenges of severe poverty and underdevelopment among peri-urban and rural communities by creating more and quality jobs. The Programme is estimated to create over 350,000 direct and indirect jobs in all parts of the country. The 1D1F seeks to achieve creation of massive employment, add value to the natural resources, ensure balanced spatial spread of industries, enhance the production of local substitutes for imported goods, promote exports, and increase foreign exchange earnings.
5. The '**One district, One warehouse**' is an initiative that aims to construct a 1,000 metric ton capacity warehouse in each of the districts. It aims to complement "Planting for Food and Jobs". The warehouses will help address poor farm-level practices, poor handling, and poor storage activities that exposes our farm produce to moulds, rodents and other pests.
6. The '**Rearing for Food and Jobs (RFJ)**' aims to develop a competitive and efficient livestock industry, that will increase domestic production, contribute to employment creation, and reduce poverty among livestock value chain actors". RFJ will focus its attention on breed improvement, productivity and production, infrastructure, feed, animal health and disease control, development of communal grazing lands, commercialisation of livestock production etc. It will focus on cattle, sheep, goats, pigs, poultry chicken and guinea fowl.
7. The '**Planting for Export and Rural Development (PERD)**' is a decentralized National Tree Crop Programme to promote rural economic growth and improve household incomes of rural farmers through the provision of certified improved seedlings, extension services, business support and regulatory mechanisms. Commodity value chains namely Cashew, Coffee, Cotton Coconut, Citrus, Oil Palm, Mango, Rubber and Shea. It is strongly linked to Ghana Beyond Aid initiative. It seeks to create sustainable raw material base to spur up the decentralized industrialization drive through One District Factory initiative.