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Proposal to Accept Supplementary Funds from the Rockefeller Foundation

Note to Executive Board representatives

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Executive Board – 125th Session
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For: Approval

Recommendation for approval

The Executive Board is invited to authorize the President to negotiate and finalize a supplementary funds agreement with the Rockefeller Foundation in support of IFAD's efforts to reduce food loss and waste in sub-Saharan Africa.

Proposal to Accept Supplementary Funds from the Rockefeller Foundation

I. Overview

1. The Executive Board is invited to note that IFAD is seeking supplementary funds from the Rockefeller Foundation to co-fund the activities under the Catalysing Post-Harvest Management for Food Systems Transformation project. To this end, the President is seeking the Executive Board's approval to negotiate and finalize the supplementary funds agreement in support of IFAD's efforts to reduce food loss and waste in sub-Saharan Africa.
2. The proposed project has been designed to leverage IFAD's investment portfolio in sub-Saharan Africa to build upon the important strides made through the Rockefeller-supported YieldWise Food Loss Initiative (YieldWise) on post-harvest loss reduction. The proposed project would complement this initiative by focusing on further refining the tools and approaches developed under YieldWise to identify innovative and financially proven technologies in selected value chains and countries. It would do so by further scaling-up the use of such tools and approaches through existing IFAD-supported value chain development projects in Kenya, Nigeria, Rwanda and the United Republic of Tanzania and by piloting alternative strategies to bridge the gap between financing needs and financial services. This effort is seen as part of a broader effort to stimulate, at the global level, private sector investments earmarked for food loss reduction in collaboration with other development partners, including the Rockefeller Foundation, Rabobank and the Rabobank Foundation, the World Bank, the World Resources Institute, Champions 12.3 and the Food and Agriculture Organization of the United Nations.
3. The Rockefeller Foundation is a private philanthropic foundation established in 1913 and based in New York. It works to promote the well-being of humanity throughout the world. To that end, it supports efforts that expand opportunities and strengthen resilience to social, economic, health and environmental challenges.
4. Through this supplementary funds agreement, IFAD shall receive US\$262,500 from the Rockefeller Foundation to support the proposed project. Specific details on the funding activities are presented in appendix I to this document.
5. The agreement with the Rockefeller Foundation will have a duration of 12 months (December 2018 – November 2019).
6. The Executive Board is the competent organ to decide on acceptance to administer supplementary funds and on the related conditions and restrictions. As specified in documents EB 1986/28/R.47 and EB 1987/30/R.28 respectively, the Board resolved to delegate authority to the President to receive and administer grants from any source to finance ongoing IFAD projects, and from Member States to finance studies and short-term technical assistance activities related to IFAD operations. As the Rockefeller Foundation is not a Member State of IFAD, and the proposed supplementary funds contribution will not directly finance the implementation of IFAD's programme of loans and grants, the Executive Board is

invited to authorize the President to negotiate and finalize this supplementary funds agreement.

7. A full cost-recovery principle (5 per cent plus interest retention) will apply, and indirect costs will be covered by these management fees.
8. The signed agreement will be submitted to the Board for information at a subsequent session.

II. Recommendation

9. The Executive Board is invited to authorize the President to negotiate and finalize the supplementary funds agreement with the Rockefeller Foundation in support of IFAD's efforts to reduce food loss and waste in sub-Saharan Africa.

IFAD Project Proposal for the Rockefeller Foundation: Catalysing Post-harvest Management for Food Systems Transformation project

Executive Summary

Food and agricultural systems need to be reshaped so that growing populations can be well-nourished while degraded lands are restored to productivity. Reducing food losses in the world's poorest countries can contribute significantly to improve food security and reduce hunger, but it also has the potential to raise income of producers by increasing their output. Further, food losses reduction alleviates unnecessary pressure on natural resources and wasteful use of energy and avoidable emissions, therefore contributing to sustainable food production.

As the leading UN entity supporting rural transformation and smallholder agricultural development, the International Fund for Agricultural Development (IFAD) is working to reduce food loss and waste (FLW) and recognizes the need for major investments by both private and public actors in rural development and agriculture as an integral part of reducing FLW efforts globally. To this end, IFAD intends to deepen its efforts, through its program of loans and grants, towards the sustainable inclusion in value chains of smallholders and FOs and SMEs – including agricultural cooperatives. In addition, IFAD is working to increase the sensitivity towards food loss reduction of the value chain projects it supports with the ultimate goal of a complete mainstreaming at corporate level. This effort is seen as part of a broader effort to stimulate at global level private sector investments earmarked for food loss reduction in collaboration with other development partners, including the Rockefeller Foundation, the Rabobank and the Rabobank Foundation, the World Bank, the World Resource Institute, the group of the 12.3 Champions, and FAO.

The proposed project, Catalysing Post-harvest Management for Food Systems Transformation, aims to leverage IFAD's strong footprint in sub-Saharan Africa by partnering with the Rockefeller Foundation, to build upon the important strides made through the Rockefeller-supported YieldWise Initiative on post-harvest loss reduction. Namely, the Yield-Wise program in Kenya, Nigeria, and Tanzania is targeting value chains such as cassava, tomato, maize, and mango. The Initiative has demonstrated the existence of significant opportunities for commercially oriented smallholders to link up with providers of technologies that once adopted would allow substantial reductions in food losses.

The proposed project would complement by focusing on further refining the tools and approaches that under YieldWise have been developed to identify a pipeline of investment opportunities based on innovative and financially proven technologies in selected value chains and countries. It would do so by further scaling-up the use of such tools and approaches through existing IFAD-supported value chain development projects in Kenya, Nigeria, Rwanda, and Tanzania and by piloting alternative strategies to bridge the gap between financing needs and financial services. The results of the proposed program are intended, on one side to increase global knowledge on private sector-led solutions to scale-up investments on food loss reduction in developing countries, and on the other to inform a launching phase of the facility on food loss reduction that the above mentioned development partners are designing.

Rationale and Context

a) Describe the main issue or problem you hope to address with your project.

Food Loss and Waste (FLW) is a global issue requiring global action. It is estimated that around a third of the food globally produced for human consumption is either lost or wasted along the food supply chain (FAO, 2011; BCG, 2018). Global, FLW is currently estimated at around 1.6 billion tons or US\$1.2 trillion per year, and is

predicted to reach a yearly level of 2.1 billion tons, worth US\$1.5 trillion by 2030 if no progress is made to reduce losses (BCG, 2018).

Food and agricultural systems need to be reshaped so that growing populations can be well-nourished while degraded lands are restored to productivity. A good starting point would be having zero tolerance for food loss and waste. Reducing food losses in the world's poorest countries can contribute significantly to improve food security and reduce hunger, but it also has the potential to raise income of producers by increasing their output. Further, food losses reduction alleviates unnecessary pressure on natural resources and wasteful use of energy and avoidable emissions, therefore contributing to sustainable food production.

Unlike food waste, which occurs between retail sale and consumption, post-harvest losses are caused by inadequate on-farm and off-farm handling and processing practices along the food supply chain. FAO and APHLIS statistics show that around 13.5% of the grain produced in Sub-Saharan Africa is lost post-harvest, which is equivalent to an estimated loss of almost US\$4 billion a year and to the annual caloric requirement of more than 48 million people (WB, 2011).

Food loss and waste is not just about lost food, is also about the environmental costs of producing food that is not consumed. Estimates suggest the additional environmental cost at around US\$700 billion (in terms of wasted water and wasted inputs like fertilisers, labour, mechanisation and transportation) and a social cost of US\$900 million (in terms of greenhouse gas emissions, loss of livelihoods, risk of conflict, adverse health effects etc.) (FAO, 2014).

A recent FAO and World Resources Institute study (2015) calculated that in 2011/12 food waste accounted for 8 percent of all global greenhouse gas emission, nearly as much as the 10 percent associated with road transportation. To put it in perspective, if food loss and waste were a country, it would be the third-largest greenhouse gas emitter on the planet (after US and China).

b) Describe the project's relevance to your organization's mission and how it fits within your organization's institutional structure.

Food loss occurring after harvest and before retail sale, also termed post-harvest loss, is a key challenge in many developing countries and one that IFAD is committed to alleviate. By reducing FLW, it is possible to keep more food in the system, improving household food availability and food access, without the need to intensify agricultural production. When one considers that around 821 million people go hungry in the world, reducing these large scale losses would make a huge contribution to achieving Sustainable Development Goal 2 on "End hunger, achieve food security and improved nutrition and promote sustainable agriculture", which IFAD is significantly contributing to.

As one of the globally leading agencies in rural development (including the fields of food and agriculture), IFAD works to reduce FLW and recognizes the need for major investments by both private and public actors in rural development and agriculture as an integral part of reducing FLW efforts globally. According to a recent assessment (IDAF, 2018), just between 2013 and 2016, IFAD has approved the disbursement of at least US\$433 million in loans and grants to support upgrading post-harvest infrastructure, equipment and capacities that are essential to enable poor farmers and entrepreneurs to minimize food losses along food supply chains. This amounts to around 12% of total disbursement approved by IFAD during the same period, or approximately US\$100 million per year. This earmarked investment covered the following:

- o US\$371 million for improved post-harvest infrastructure, including roads, collection centres, storage warehouses, processing and packaging facilities;

- US\$35 million to upgrade equipment for crop harvesting, post-harvest handling, drying, cooling, storage, processing and transport; and
- US\$27 million to training farmers, farmer groups and value chain operators on post-harvest techniques, including operations and maintenance.

IFAD's focus on food losses is particularly concentrated in sub-Saharan Africa (SSA), where according to recent research progress on food reduction is potentially largest. About 40% of the investments earmarked for food loss reduction have in fact been for projects in SSA. Countries where IFAD's program of work on value chain development has been more active in SSA include Kenya, and Nigeria. Pending the completion of the current transition phase, we expect further development of value chain development programs in Tanzania.

Although IFAD-funded projects are being implemented by governments, with technical support from IFAD and other development partners, the creation of an enabling environment through improved infrastructure and regulatory frameworks provides the opportunity for crowding-in large amounts of private sector investment, both from smallholders and Farmer Organizations (FOs) as well as SMEs and larger agribusiness companies. A key challenge though is to ensure that the share of such private sector-led investments that are earmarked for food loss reduction along the upstream segments of the value chains can be increased to a level required to meet the global needs above outlined. In that regard, main bottlenecks are represented by barriers to commercial credit faced by small farmers and FOs and the identification of, and access to, suitable food-loss-reduction technologies. While such bottlenecks have traditionally stumbled the inclusion of small farmers in modernizing value chains attracting major efforts in overcoming them, the relevance of food losses from the point of view of global sustainable development makes action the more urgent on this particular front.

To that end, IFAD intends on one side to deepen its efforts, through its program of loans and grants, towards the sustainable inclusion in value chains of smallholders and FOs and SMEs – including agricultural cooperatives; on the other IFAD intends to increase the sensitivity towards food loss reduction of the value chain projects it supports with the ultimate goal of a complete mainstreaming at corporate level. This effort is seen as part of a broader effort to stimulate at global level private sector investments earmarked for food loss reduction in collaboration with other development partners, including the Rockefeller Foundation, the Rabobank and the Rabobank Foundation, the World Bank, the World Resource Institute, the group of the 12.3 Champions, and FAO.

IFAD-supported investment projects are well placed to provide a supportive environment towards an increase of private sector investments in food loss reduction at all levels. Value chain development projects benefit from several initiatives, including: (i) enhancing collaboration with the private sector through the facilitation of market access for farmers and FOs; (ii) improving the coordination of the different value chain actors operating along the targeted value chains; (iii) improvement and provision of information distribution systems; (iv) fielding studies and research pertaining to commodity chains selected by projects; (v) actions directed towards the development of an enabling policy environment, including the development and strengthening of quality standards and quality enhancement institutions; (vi) improving access to financing mechanisms such as matching grants and value chain financing packages that are targeted to smallholders, FOs, cooperatives, community agribusinesses, and processors.

The proposed project is therefore expected to identify innovative approaches and tools to further enhance the sensitivity of IFAD-funded projects towards the reduction of food losses at post-harvest level. A key thrust in this regard is increasing access to commercial financing of private sector investments earmarked for food loss reduction

at the post-harvest stage. In that context, IFAD is seeking to collaborate with partners that could help pilot innovative financial and technological solutions for successive scaling-up through its global program of projects and through the facility on food loss reduction that is currently being developed in partnership with the above mentioned partners.

- c) I identify major related work in the field. Describe how your work differs from, contributes to, or complements that work.

Indeed, the Rockefeller Foundation has been a major proponent of renewed and increased efforts to increase investments leading to substantive reduction in food losses. Its YieldWise initiative in Kenya, Nigeria, and Tanzania targeting value chains such as cassava, tomato, maize, and mango has demonstrated the existence of significant opportunities for commercially oriented small holders to link up with providers of technologies that once adopted would allow substantial reductions in food losses. While there is a demonstrated latent demand for such technologies that has also clear economic and financial rationale, its realization requires bridging the gap with providers of value chain financial products and services.

Other major initiatives on food loss reduction have been spearheaded by several development partners. FAO is well recognized for its efforts to develop an internationally-recognized system of accounting for food losses and waste. It has also invested in the identification of suitable technologies under various contexts. The World Bank is currently developing a conceptual framework and associated action plan on food loss reduction that is expected to contribute to global efforts in a substantive way. The influential group of global agribusiness companies 12.3 Champions, coordinated by the World Resource Institute, have become major advocates for reforming business processes and practices to reshape global food value chains. Among the key financial institutions, the Rabobank and the Rabobank Foundation, are supporting major efforts in developing global initiatives that would result in a great inflow of financial resources targeted to privately-led food-loss-reduction investments in developing countries.

In that regard, a facility tasked with this specific goal is being designed and developed in collaboration with the above mentioned partners and with the support of the Government of the Netherlands. IFAD has been identified as the agency that would host such facility. The facility is expected to support several activities, including: (i) assisting in the development of national strategies on food loss reduction based on sectoral diagnostics; (ii) provide technical assistance in the identification of food-loss-reduction related investment opportunities and tailored financial packages for priority value chains, with a particular focus on small farmers, FOs, and SMEs, but not exclusive of larger agribusiness companies provided these demonstrate linkages to small farmers; (iii) provide financial services either directly or indirectly through nationally existing networks of rural financial institutions; (iv) monitoring and evaluating impacts of the supported investments on food losses.

The proposed project would complement the above described initiatives by focusing on further refining the tools and approaches that under the Rockefeller Foundation supported YieldWise initiative have been developed to identify a pipeline of investment opportunities based on innovative and financially proven technologies in selected value chains and countries. It would do so by further scaling-up the use of such tools and approaches through existing IFAD-supported value chain development projects in Kenya, Nigeria, and Tanzania and by piloting alternative strategies to bridge the gap between financing needs and financial services. The results of the proposed program are intended on one side to increase global knowledge on private sector-led solutions to scale up investments on food loss reduction in developing countries and on the other to inform a launching phase of the facility on food loss reduction that the above mentioned development partners are designing.

d) If collaborating with other institutions, provide their names and describe their roles and responsibilities in the project.

Institutions that will be expected to collaborate with the proposed project include:

- National and local governments, focusing in particular on agencies that have a mandate on food losses and agribusiness development. Their role will be one of facilitating the dialogue with key stakeholders and of champions for scaling-up based on evidence generated by the project;
- Rural banks and rural financial institutions, their associations, and national regulatory bodies. Selected rural financial institutions will be identify to design and pilot financial instruments tailored to the investment needs identified under the YieldWise initiative and in the context of IFAD-funded project, where these are relevant from a food loss reduction perspective. National regulatory bodies' engagement ensures that any design and piloting is consistent with key regulations and financial stability mandates.
- Development partners (DPs), including the Rockefeller foundation, the Rabobank Foundation, the World Bank, FAO, and the CGIAR organizations, depending on country presence and engagement in the targeted value chains. IFAD expects DPs to act as sounding board for the proposed project and as supports of scaling-up pathways of innovations successfully piloted under the project.
- National and international research centres and national policy think tanks. These will be tapped into for specific assessments of investment opportunities related to value chains and countries not targeted by the Yield-Wise program; evaluations and impact assessments, knowledge management, and advocacy at national and international level.

Project Vision and Activities

a) Describe the project and how it aims to address the problem(s) identified in the prior section.

The project will focus on Kenya, Nigeria, Rwanda, and Tanzania and will aim to:

1. Support the four multi-stakeholder platforms created across the value chains to facilitate dialogue and connections to finance and technical support based on their identified needs and priorities;
2. Develop a financially viable pipeline of public and private sector investment for the forthcoming food loss reduction facility;
3. Design relevant financial products that can support the private sector to provide services to smallholder farmers; and
4. Create awareness regarding the importance of food loss reduction for improved competitiveness and efficiency of agricultural cooperatives and agribusiness SMEs and as an opportunity for improving access to financial services and products.

In the context of the value chains and countries targeted by the proposed program, there might be instances where rural financial institutions may be interested in developing innovative financial services or products that are tailored to the specific nature of the commercialized commodities, types of assets, equipment, and facilities included in the investment plans, the social context within which contractual relationships involving stakeholders are realized, and specific characteristics of local farmer groups and cooperatives. Besides the scaling-up of the YieldWise program achievements, the program will therefore consider opportunities for piloting the design of innovative financial tools that would be specifically tailored to investments earmarked for food-loss reduction. This part of the program will be carried out in collaboration with local stakeholders, rural financial institutions, and research centres. It is important to note that designing of innovative financial products will play a critical

role in ensuring that not only farmers and cooperatives that are already well collateralized can benefit from the support that food-loss sensitive investments will receive from donors and governments but also those farmers and cooperatives that are more disadvantaged with regard to access to credit.

- b) Describe proposed project activities, including the status of the work and accomplishments to date, if applicable.

The program's activities will be grouped into four components:

Component 1: Enhancing and expanding existing multi-stakeholder platforms: synergizing networks of stakeholders developed under the YieldWise initiative with those developed under the IFAD-funded projects, the proposed program will expand business linkages and networking between farmers, FOs, and SMEs, with YieldWise companies and partners.

Work under this component will take stock of the assessments carried out under the YieldWise initiative by Sustainable Trade Initiative (IDH) and Initiative for Global Development (IGD) and support additional ones where their rationale is identified. Through participation in multi-stakeholder value chain platforms, FOs, SMEs, agricultural coops will be exposed to food-loss sensitive technologies and practices and benefit from an initial assessment of the improvement in efficiency, competitiveness, and market access that these will provide. Demonstrations will be delivered through the collaboration with YieldWise partners (Alliance for a Green Revolution in Africa; Farm Concern International; Farm Radio International; Purdue University; TechnoServe; and IDH). At the same time, government agencies at national and local level will be exposed to the broader benefits that such technologies and business practices can deliver when brought to scale in terms of improved food security, resilience, and modernization of food value chains.

This component will deliver guidelines to assess and operationalize food loss reduction investments that more generally could serve as models for other commodities and other contexts. These will be prepared in collaboration with YieldWise partners. IFAD's program in the target countries includes the following projects whose focus is on inclusive value chain development and post-harvest investments and that could benefit from food-loss-sensitive interventions:

Country	Areas for Alignment
Kenya	<p>Kenya: the Kenya Cereal Enhancement Program (KCEP), a \$116 million project with project with completion date in September 2019. The supported commodities include maize, sorghum, millet and associated pulses. The project aims to promote the graduation of smallholder farmers to commercially oriented, climate-resilient agricultural practices through improvements in productivity, postproduction management practices and market linkages for targeted value chains. Key activities include firstly, improving access to commercial inputs and technologies through an e-voucher platform and supporting the establishment of productive and resilient agro-enterprises. Secondly promoting improved on-farm grain handling and management, access to storage, and warehouse receipt systems. Thirdly, linking farmers to financial services and building the capacity of value-chain stakeholders, including youth, to profitably engage in the provision of agricultural services. When linked to KCEP the proposed program could further benefit, at least in its initial stages, from the IFAD-supported Programme for Outreach of Financial Innovations and Rural Finance (PROFIT) whose project completion date is 30 June 2019.</p>
	<p>We will align on this by prioritising: Lessons learned on the maize</p>

	value chain in Kenya are shared and also where possible use infrastructure built such as markets to support the mango value chain.
Nigeria:	<p>The Value Chain Development Project (VCDP), with expected completion date in December 2019 to be followed by a second phase. The project focuses on developing agricultural markets and increasing market access for smallholder farmers and small to medium-scale agro-processors and on enhancing smallholder productivity – and thus increasing the volume and quality of marketable produce – by strengthening farmers’ organizations as well as supporting smallholder production. This program takes a holistic and demand-driven approach to addressing constraints along the cassava and rice value chains. It does so through an inclusive strategy, strengthening the capacity of actors along the chain – including producers and processors – as well as public and private institutions, service providers, policy-makers and regulators. At the same time, the program strongly emphasizes the development of commodity-specific Value Chain Action Plans at the local government level, which serve as the basis for rolling out sustainable activities to reduce poverty and accelerate economic growth. The commodities on which the program focuses include rice, cassava and various horticultural products. The program has established strategic partnerships with major off-takers for rice, including Olam.</p> <p>For cassava: We will align by ensuring that all actors supported and led by IDH on visioning for the sector and developing clear action plans.</p> <p>For tomatoes: Support in the tomato triangle to ensure that the platform is operational, vibrant, visionary and well-funded.</p>
Tanzania	<p>The Marketing, Value Addition and Rural Finance Support Program (MIVARF) with project completion date in March 2020. Commodities on which the project focuses include: paddy, cassava, sunflower, maize, cashew nuts, and sesame. The project seeks to increase access of poor rural people to a wider range of financial services for productivity-enhancing technologies, services and assets; and increase access to sustainable agricultural input and output markets and opportunities for rural enterprise.</p> <p>MIVARF is implemented in all 26 regions of the mainland and Zanzibar. With a total cost of US\$ 165.37 million, of which US\$ 90.6 million financed by IFAD, MIVARF is one of the largest investments of IFAD in the East and Southern Africa region. The Programme has two main components: (i) Marketing Infrastructure and Systems and (ii) Rural Finance. Under the marketing component, MIVARF is supporting: rural marketing infrastructures; smallholder farmers’ access to adequate equipment for value addition/processing; capacity building for farmer groups on value addition, post-harvest management, market access including WRS so that they can make use of the upgraded marketing infrastructures and then linked to profitable markets and public-private-producer-partnerships (4Ps). In the maize value chain, MIVARF co-financed 8 maize warehouses across 5 regions (Ruvuma; Njombe; Arusha; Manyara; Tanga) and supported business planning (Bankable Business Plans, MoUs, Operation Manuals) to Producers Organizations and marketing infrastructure development; forward and backward market linkage facilitation; Consortium development. The rural finance component has been working with Micro Finance Institutions; SACCOS; Village banks and other financial institutions to enhance their capacity to finance rural economic activities through the rolling out of innovative instruments. In this context the proposed program could support: (i) the Tanzanian Agricultural Development Bank (TADB) better understand the maize value chain (as</p>

	well as other value chains) and adapt their financial products and delivery methodology; (ii) the activities of the different maize Consortiums created by MIVARF.
Rwanda:	<p>The Climate Resilient Post Harvest and Agribusiness Support Project (PASP) with expected completion date in March 2019 but with a possible extension of up to 18 months. The project carries out a pro-poor and climate-resilient approach to post-harvest investment. This approach is based on so called HUBs, multi-functional business centres that constitute “the first significant point where primary produce is aggregated”. Through consolidated HUBs, the project intends to achieve: (i) Capacity development and business coaching for cooperatives, farmers’ organizations and small and micro-enterprises involved in delivering produce to market; (ii) Support the elaboration of Business Plans (BPs) for agribusiness investment in climate-resilient drying, processing, value addition, storage, logistics, distribution and other post-harvest activities that are expected to reduce product losses and increase incomes. The project design exhibits a thorough awareness of the extent of PHL in Rwanda, and of the opportunity to reduce it.</p> <p>One of the main objectives of PASP is, indeed, to reduce food losses. To this aim, the project design includes several crop-specific analysis of PHL related to production and post-harvest practices. These food loss estimations provide a baseline against which the project’s contribution to food loss reduction can be evaluated. The project also plans to undertake systematic food loss assessment studies for selected crops during implementation. PASP is currently negotiating a cooperation agreement with Africa Improved Foods (AIF) and Kumwe, a local SME. AIF is a joint-venture between the Government of Rwanda and a consortium of Royal DSM, Dutch development bank (FMO), DFID IFC. In partnership with Kumwe, AIF has proposed an innovative approach to reduce post-harvest losses and aflatoxin (e.g.; mobile dryers). AIF, Kumwe and PASP are currently negotiation a cooperation agreement, which will allow farmer cooperatives and their members to: (i) Increase maize productivity; (ii) reduce post-harvest losses (iii) access quality services and support. This and similar partnerships can be identified under the proposed grant. Cooperatives and SMEs struggle to meet their financial needs for investment and working capital. Under the grant, a review could be conducted of all PASP supported cooperatives and SME. This would help develop a pipeline of investments in SME’s and cooperatives, which would allow them to expand their loss reduction operations.</p>

Component 2: Development of a pipeline of investments in SME’s/Coop’s to expand their loss reduction operations. Business networks and linkages developed under the previous component are expected to lead to the identification of concrete partnerships between producers, off-takers and other value chain actors engaged in processing, transportation, financing. The proposed program will invite presentation of food-loss-sensitive business plans. After an initial screening, business plans will be reviewed and strengthened by technical specialists engaged in the program and drawn from the YieldWise networks, resulting in a short list of bankable food loss reducing investments. It is expected that beyond financial support that IFAD-funded projects may provide, most of the selected business plans will be lined up for financing from commercial banks and other rural credit institutions. Further down the road, the selected business plans will be reviewed by the forthcoming food loss facility for financing eligibility. Once their business plans are financed and made operational, farmers will benefit from the support provided by, but not limited to, YieldWise partners. The proposed project will take off by initially leveraging the infrastructure and networks developed by YieldWise initiative of the Rockefeller Foundation in support of the

upcoming food loss reduction facility financing mechanism, and by embedding the evidence, lessons learned, and knowledge generated in these catalytic demonstrations

Under the YieldWise program, the Initiative for Global Development (IGD) has identified opportunities for YieldWise company-led investment opportunities for four commodities in three countries: Nigeria-cassava and tomatoes; Kenya-mangoes; Tanzania-maize. The identification focuses on off-takers but integrates as well other key stakeholders in downstream segments of the value chain and allied services (e.g. technology, transport logistics, and finance companies). With the collaboration of the Global Alliance for Improved Nutrition, YieldWise has also supported the creation of the Postharvest Loss Alliance for Nutrition (PLAN) and of a Business to Business Engine (B2BE) in Nigeria to exchange knowledge and implement technology solutions that will create measurable reductions in postharvest loss of perishable food. The potential for demand-led value chain food loss sensitive investment opportunities can be fulfilled through the establishment of contractual partnership with smallholders, FOs, and local/community SMEs. IFAD-supported projects in Kenya, Nigeria, and Tanzania provide platforms that can facilitate the establishment of business linkages between YieldWise companies and smallholders, FOs, and cooperatives. Through a project-assisted matching between off-takers and farmers, business partnerships can be discussed, analysed, and developed into business plans with well identified investment plans. Key to the realization of such investment plans is access to financial services. Depending on the project and context, IFAD-funded projects provide various forms of facilitating access to financial services, including through the provision of matching grants and link up with financial providers that are prone to accept contracts or receivables as guarantees. It is expected nevertheless, that the food loss reduction facility under development with the contribution of RF, IFAD, Rabobank Foundation, World Bank, and other DPs will target in its initial phase the pipeline of investments developed with the proposed program.

Component 3: Design and piloting of innovative food-loss-sensitive financial products. In several circumstances it can be expected that smallholder farmers and agricultural cooperatives will face major difficulties in becoming bankable customers for many of the existing rural financial institutions given existing financial products. Experience has shown that when assisted with proper expertise, rural financial institutions can develop innovative financial products and services that are able to address the failures characterizing specific commodities in specific socio-cultural contexts. Taking advantage of local social norms rather than farmers characteristics, until then not well understood, may open opportunities for introducing innovative financial products or services that allow small farmers and their organizations to overcome existing barriers to financial markets. Similarly, the impact of food loss-reducing production, processing or storage technologies on profitability and competitiveness may be poorly understood by financial providers in rural areas. Technical assistance to overcome this knowledge gap and expand on existing financial products and services could greatly facilitate access by small farmers to food-loss-reduction technologies. The proposed program will therefore identify rural financial institutions in selected areas of the four target countries that are willing to design and pilot new services and products. Specialized technical assistance will be mobilized through the networks of the YieldWise program and IFAD-funded projects. Small grants from the project budget will be allocated to pilot newly designed products and services under the supervision of national regulatory bodies.

Component 4: Program management, knowledge management, and M&E. The program will be coordinated and supervised by an IFAD HQ-based team in Rome and implemented through IFAD's country offices in the four target countries. Detailed implementation plans will be agreed with the country offices after consultations with stakeholders, including networks of YieldWise companies, management units of IFAD-funded projects, and representatives of FOs, SMEs, and government agencies with mandates including food losses.

c) List the specific project deliverables, by deliverable date. If applicable, provide a detailed workplan as an Appendix.

The proposed program will deliver the following set of outputs over the course of 12 months, beginning with project start-up in mid-December 2018:

- Six guidelines to assess and operationalize food loss reduction investments. The targeted commodities include maize, cassava, rice, cashews, and two additional crops to be determined through stakeholder consultations leveraging existing multi-stakeholder platforms.
- Four value chain platforms linked to the IFAD-funded projects in the four target countries, each with well-defined priorities, work-plan, and finances. Each platform will consist of a set of workshops, forums, fairs, with detail activities to be determined through stakeholder consultations.
- Four lists of bankable food-loss-reducing investments (one per country/project) that will be lined up for possible financing by the forthcoming food loss reduction facility. The number of investments in each list that will potentially be financed by the forthcoming facility will be determined based on demand, identified during the project.
- One study reporting on pilots of innovative food-loss-sensitive financial products and services
- An impact assessment/evaluation of the program's activities.

A detailed work plan will be developed upon grant approval, together with RF and through initial consultations with stakeholders and YieldWise partners.

d) Describe the broader change to which the project will contribute including the desired outcomes and the ways in which the project will positively affect the intended beneficiaries.

The proposed program is expected to lead to:

- Increased awareness of food-loss-reduction technologies and business practices and their impact on competitiveness, cost-efficiency, and market access. Increased awareness is essential to transform localized programs and projects into scalable national initiatives through major investment projects.
- A more sustainable and inclusive development of the selected value chains as well as demonstration effects that can provoke changes in other value chains and other countries in the region.
- Vibrant multi stakeholder platforms that are embedded in national strategies / planning committees and are contributing towards the development of the value chains
- Increased funding opportunities for SMEs to support their expansion to either source from or provide services to smallholder farmers

e) What (if any) significant challenges exist in your capacity to achieve your intended outcomes?

IFAD does not foresee major constraints to its capacity to operationalize the proposed program. At the same time, it is important to maximize the knowledge on technologies, commodities, market opportunities, and social contexts that lie across the many partners and stakeholders, in country and outside. To that end, the program will hire a senior expert consultant that will take responsibility, among other tasks, for identifying IFAD's knowledge gaps in managing food loss reducing investment projects in SSA as well as solutions that have been developed by other partners, including Rockefeller's, with the objective of raising awareness within IFAD and initiating process of knowledge 'contamination.'

f) Plans for Knowledge Management and Communications

- a) The project deliverables will be shared and discussed internally to IFAD through a series of seminars, in collaboration with FAO. They will be also disseminated through IFAD's partner regional networks (e.g. IFAD Africa, IFAD Asia). Results of pilots (e.g. under component 3) will be uploaded in IFAD's Solutions Portal. When up and running, the food loss reduction facility's web site will host the program's outputs.
 - b) The grant will fund US\$20,000 for the production of short videos, stories, briefs, and interviews with influential business leaders, leaders of well recognized cooperatives, SMEs, and FOs. Newspapers and both local and international media, including TV and radio, will be invited to review and document the results of the project. The objective of the communication campaign will be to sensitize the public opinion to the importance of reducing food losses, particularly among small farmers and small farmer-based value chains, in order to make food systems more sustainable and inclusive. Policy makers at national and local level, particularly those leading agencies that have an explicit mandate on food losses, will be invited to participate to the platforms supported by the grant with the objective of nurturing future champions for the agenda. Learning routes based on exchange visits among stakeholders of the targeted projects will be supported by the grant.
 - c) While all data and information produced by the project will be made accessible to the public, subject to the provisions in the CCBY 4.0, the list of bankable projects will remain property of RF and IFAD and disclosed only with the consent of the beneficiaries and other related stakeholders given the commercial-sensitivity of the information therein included.
- g) Monitoring
- d) Program results are expected at the outcomes and outputs levels, and indicators will be developed to be integrated into a results monitoring framework.
 - e) IFAD's Senior Technical Specialists/Country Program Officers in each country office will be responsible for ensuring effective management of the Rockefeller Foundation grant.
- h) Evaluation
- a) The program's budget will make provisions for a final evaluation, to be conducted by project consultants. The latter will be based on the analysis of monitoring data (e.g. stakeholders' opinion over quality of events attended, investment opportunities that have resulted in commercial transactions or formal contracts, leaders' interviews and FGD, uptake of promoted technologies and business practices through inclusion of business plans in the pipeline, farmers' satisfaction with training received, etc.). While the evaluation will consider as much as possible the available quantitative information, it will be mostly qualitative in nature given the nature of the activities to be covered by the program. To that end, it will not rely on experimental or quasi-experimental methods based on household surveys.
 - b) A baseline study will be commissioned at the start of the project to examine the relevance of the food loss agenda at the national level in the four target countries and assess the degree to which key decision-makers and business leaders in the food sector are aware of its importance. The baseline study will also examine the extent to which food loss reduction technologies and business practices are adopted or spread across the country through key informant interviews.
 - c) Success will be represented by a wider appreciation of the food loss agenda at the national and subnational level among relevant decisions makers and business leaders in the food sector. A second criterion will be the increased sensitization and interest among leading rural financial institutions that may regard financing of food

loss reducing investments as an opportunity for expanding their reach among agribusiness and organized farmers. Failure would be apparent whenever participation to the platforms supported under component 1 remain weak or limited, when the investment pipeline in the four countries is tilted towards projects that present low financial rates of return, or when rural financial institutions do not regard food losses as an innovative line of business.

i) Risk Management

a) The most significant risks to the project can be classified as follows:

- Political: national or local elections lead to a stall in IFAD-funded projects (limited, given duration of the grant). This risk will be mitigated by reducing engagement in that project to maintain policy dialogue while expanding activities linked to the remaining project.
- Collaborative implementation arrangements: management units of the IFAD-funded projects do not collaborate with the program and undermine activities under components 1 and 2 (low/medium). This risk will be mitigated through dialogue with the lead technical agency in government, by activating business leaders and recognized authorities through sensitization on the importance of the food loss agenda, and by facilitating learning routes that involve project managers to expose them on progress achieved in other contexts, either at national level or in another of the targeted countries.
- Tanzania may present some challenges given the volatile decision making process that has been characterizing the country recently. This will be managed through dialogue with government in order to ensure that the initiative is seen as closely linked to the ongoing project, which is under regular implementation.

b) If you are requesting funds toward a larger project budget, what will happen if you do not receive the anticipated funding from other sources? If this is a longer term project, how will it be sustained after the Foundation's funding has ended? N/A

j) Budget Narrative

a) The budget for the proposed program is US\$262,500. The program budget will be allocated to the following expenditure categories:

- Consultants: US\$115,000. Consultants will be contracted to carry out the activities under component 1, 2, and 3.
- Workshops/forums/fairs: US\$40,000. These will be required as part of the implementation of the stakeholder platforms under component 1.
- Financial innovation grants: US\$35,000. The grants will be allocated to selected rural financial institutions across the four countries to incentivise the design and piloting of innovative financial products and services under component 3.
- Publication materials, media products, editing, etc.: US\$20,000. Mainly as part of KM under component 4.
- Travel: US\$40,000. To cover the costs of program management and evaluation to each country.
- A full cost-recovery principle (5 per cent plus interest retention) will apply, and indirect costs will be covered by these management fees.

IFAD welcomes the opportunity to collaborate closely with the Rockefeller Foundation and YieldWise initiative on this effort.

Rockefeller Foundation Board of Directors

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Became Board Chair in June 2016. He is also the Senior Advisor of Providence Equity Partners LLC. Prior to this, he served as Chairman of the Board of Citigroup Inc, Chairman and CEO of Time Warner, and Chairman and CEO of Dime Bancorp, Inc. He held various positions in state and federal government, as counsel for Nelson Rockefeller and as a senior White House aide under President Gerald Ford.

Helene D. Gayle, President & CEO, The Chicago Community Trust

She is President and CEO of The Chicago Community Trust. Previously, Dr. Gayle was CEO of McKinsey Social Initiative, and has spent 20 years with the Centers for Disease Control, working primarily on HIV/AIDS.

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She is Country Chair for Man Group in China, one of the world's largest hedge fund managers. Before joining Man Group, Li was Managing Director of GLG Partners for China.

Sharon Percy Rockefeller, President & CEO, WETA

She has served the public broadcasting community for more than 30 years as a leader and policymaker. She serves on the boards of the National Gallery of Art, The Museum of Modern Art, and Sibley Memorial Hospital and The Rockefeller Foundation.

John W. Rowe, MD, Professor in the Department of Health Policy and Management, Columbia University

He is the Julius B. Richmond Professor in the Department of Health Policy and Management at the Columbia University Mailman School of Public Health. He currently leads the MacArthur Foundation's Network on An Aging Society and chairs the Institute of Medicine's Committee on the Future Health Care Workforce for Older Americans.

Dr. Rajiv J. Shah, President, The Rockefeller Foundation

Previously was appointed as USAID Administrator by President Obama in 2009, served as Chief Scientist and Undersecretary for Research, Education and Economics at the United States Department of Agriculture.

Admiral James Stavridis, USN (Ret), Dean, The Fletcher School of Law and Diplomacy, Tufts University

He attended the US Naval Academy at Annapolis, and spent over thirty years in the Navy, rising to the rank of 4-star Admiral.

Ravi Venkatesan, Chairman, Bank of Baroda

He is also a Fund Advisor to Kalaari Capital and a venture partner at impact investor Unitus Seed Fund. Ravi is the founder chairman of Social Venture Partners India, a national network of philanthropists addressing social problems through venture philanthropy.