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and

International Fund for Agricultural Development

**Improving the Inclusiveness of Agricultural Value Chains in West Africa:
The Role of Market Segmentation and Emerging Sub-Channels**

Work Plan

July 2012

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1. Overview

This work plan aims to: 1) describe the rationale for the choice of countries and commodities for the analysis of inclusiveness in value chains; and 2) set out the four major phases of activities designed to meet the overall goal of this study, which is to increase the effectiveness of IFAD-financed support to value chain (VC) development in increasing the incomes of the rural populations, particularly smallholder farmers, women, and youth. Table 1 summarizes research outputs under each phase of activities, while Table 2 provides a project activity calendar.

2. Target Commodities and Countries

2.1 Value Chain Commodities:

The research team selected value chain commodities with regard to: 1) their relative importance in terms of crop production and consumption, 2) their growth perspective, 3) their employment and income generation potential, 4) their ability to reach target groups (poor smallholders, women, and youth) and, 5) their generalizability (prevalence of the commodities across different countries) (see appendix A). Based on these criteria, MSU proposes that rice, cassava, and selected horticultural value chains be the focus of this initial 18-month project.

Rice is a strategic value chain because it is a major food staple and plays important roles in the socio-economic development of West Africa, especially for the poor rural and urban populations. As such, it is a crop that receives a large degree of attention from policy makers. Along with cassava, ECOWAS selected rice as a top priority staple for the 2011-15 regional CAADP investment program. In addition to being a critical food security crop, rice is also a large employer of poor smallholder farmers. Opportunities in rice markets exist that could lead to increases in production, processing, and exports, which therefore could improve the livelihood of poor rural households. Examples include yield improvement, quality enhancement, and the creation of value-added products in the value chains.

Cassava is a key staple commodity in coastal West Africa (WA). The combination of growing market demand for cassava products, increased production and recently developed low-cost cassava processing technologies have contributed to expand employment opportunities all along the cassava value chain, especially for women. In addition to being processed into food products, such as gari, fufu, and tapioca, cassava is being used to make alcohol, starch, chips, livestock feed and (in Asia) polymers. Given its high potential to reduce rural poverty and enhance food security, cassava has received attention from policy makers, who have made it a priority staple, and from IFAD, which has made consistent efforts to improve coordination and efficiency within the cassava chains.

Throughout WA countries, increasing incomes and urbanization are driving up demand for horticultural products. The growing demand for fruits and vegetables opens new market opportunities for high-value and labor-intensive products which, in turn, have the potential to generate expanded employment for the rural poor and to raise their income. Indeed, hired labor is substantially higher on farms cultivating horticultural crops since they require more labor per unit of land than other crops. In addition to creating jobs at the farm level, horticultural value chain development leads to off-farm job opportunities in processing and marketing operations (e.g., packaging, processing, and retailing).

Horticultural crops can be arrayed along a continuum based on three dimensions: start-up costs, perishability, and management skills needed to grow and handle the crops post-harvest. This study will focus on three horticultural crops located at different points along this continuum. At one end of the spectrum are onions, which are less perishable, less difficult to grow and handle, and less costly to produce than many other horticultural crops. Cabbage, being somewhat more perishable, occupies an intermediate position. At the other end of the spectrum, tomatoes are highly perishable, more difficult to market and require expensive inputs. All three crops are widely grown in WA. The choice of these three horticultural crops offers good contrasts along the three dimensions mentioned above (start-up costs, perishability, and management skills) and therefore will provide useful and geographically generalizable information on how these three dimensions influence IFAD target groups' participation and benefits in horticultural value chains.

In contrast to non-staple food crops, such as horticulture, governments in WA have heavily intervened in the production and commercialization of staple food crops, such as rice, due to their political sensitivity. As such, the scope for innovation in the staple food (e.g., rice) value chain may be more constrained, particularly where politicians view large farms as the only way to meet growing urban food demand. Therefore, rice and horticulture value chains are two interesting cases to analyze since they allow contrasting what is possible in a staple-food value chain with possibilities in a non-staple food value chain. They also differ in terms of their perishability and storability attributes. As such, the analysis of rice and horticultural products allows exploring the effects of various commodity attributes (e.g. perishability and storability) on opportunities (e.g., job creation) and constraints (e.g., seasonality) faced by the different stakeholders along the supply chains, including the poor, women, and youth. Cassava is in the middle, since it is storable in the ground before harvest but perishable after harvest, and has received some attention from policy makers but not to the same extent than rice. Through this project, we will explore why there has been much less government intervention in the cassava sector and how that has affected the capacity of the cassava value chain to innovate and to be inclusive.

2.2 Countries

The selection of proposed countries is based on five different criteria: 1) interest and willingness of IFAD country project managers and country teams to participate actively in this study, 2) importance of key value chains of interest in each country, 3) availability of adequate secondary data on selected value chains and feasibility to conduct interviews to gather primary data essential to the analysis, 4) presence of local collaborators who are interested in participating in this project, and 5) possibilities of regional spillovers (see appendix B). Among a list of five possible countries, MSU proposes three for this study: Guinea (Conakry), Benin, and Mali.

Democratic Republic of Congo (DRC) was not selected in this analysis due to time and budget constraints. Carrying out a study in DRC would have required additional trips in order to make contact with local partners (research institutes) and to get a good understanding of production systems and local realities facing poor smallholders, women and youth in that country. Given the short timeline of this study and that traveling to DRC is more expensive (travel costs were not budgeted accordingly in the approved proposal), MSU proposes to keep DRC in the selection of countries for a second phase of analysis, if such a project materializes.

The rice case studies will focus on Mali and Guinea, two major producers of rice, but with different channels studied in each country. In Guinea, particular attention will focus on parboiled rice, whose processing and marketing is a major employer of women. In Mali, the focus will be on the scope for upgrading rice production in areas outside the Office du Niger, such as the lowland inland swamp (*bas fonds*) systems in the south. In both studies, particular attention will be put on improving quality in production and post-harvest handling and processing.

The cassava value chain study will be implemented in Benin. In addition to experiencing a significant increase in cassava production over the last decades, Benin has been one of IFAD's target countries for its roots and tubers development program. Benin's close proximity to Nigeria makes it also an ideal location for assessing rates of regional cassava technology and demand spillovers. The presence of the Sonrhai Centre in Porto Novo, which has done very interesting work on mechanization targeted towards small-scale farmers and processors, also offers the opportunity to explore the potential impact of such technologies on a more inclusive approach to value chain development.

The horticulture investigations target Mali, which already produces and exports a wide variety of horticultural crops and where there is growing potential for more production and export, especially to regional markets. With the cotton sector in crisis, Mali is striving for agricultural diversification, particularly through increased rice and horticultural production. An interesting feature of the Malian horticultural sector is that most of vegetables are grown in mixed-cropping farming systems. For instance, women often grow horticultural products during the dry season on land used for irrigated rice during the rainy season. Mali is a good country to conduct a

horticultural value chain analysis since it allows us to examine marketing issues and opportunities within the country and across borders as well as interactions between rice and horticultural production. Moreover, the analysis of the horticultural value chains allows us to explore ways in which poor populations, especially young people, can participate in value chains at the production level but also in upstream (e.g., input delivery) and downstream (e.g., storage, processing, and marketing) activities. Among other things, the young people have the potential to serve as an important vector of information to their relatives on the farm about the types of products needed downstream and the types of inputs available upstream.

In all three countries, MSU anticipates collaborating with the national agricultural market information systems, with which MSU has collaborated for over 20 years (the OMA in Mali, SIPAG in Guinea, and SIM/ONASA in Benin). For the studies in Benin on cassava, MSU will likely draw on two of its other long-time local partners, LARES (Laboratoire d'Analyse Régionale et d'Expertise) and the economics laboratory of IITA's Cotonou office. In Mali and Guinea, MSU will likely collaborate with the national and regional Chambres d'Agriculture in the zones where the surveys will take place. The work will be conducted conjointly by MSU US-based and Mali-based staff. For instance, MSU Mali-based staff will facilitate the development of contact agreement with local partners and be heavily involved in the field surveys, while the development of the conceptual framework and the literature review will be initiated by the US-based staff, but will also draw on insights from the Mali-based team.

3. Phases of Activities

3.1 Planning and Review Phase (July-September 2012)

During this first phase, the MSU team will review the literature related to inclusiveness and value chains, especially for rice, cassava, and horticultural products; collect secondary data on these value chains, and make initial contacts with potential local partners to solicit their collaboration. The team will use the information thus gathered to: 1) develop a conceptual framework to assess inclusiveness in value chains; this framework will be general enough to be applied to different commodities and countries; 2) identify the dynamics and structure of the rice, cassava, and horticulture value chains in the selected countries. Key elements that need to be identified to undertake in-depth inclusive value chain analyses are:

- Key actors, their functions, motivation, and constraints
- Levels of participation and benefits in the value chains for poor smallholder farmers, women, and youth
- Flows of products in terms of channels, quantity, quality, diversity, and seasonality.
- Flows of knowledge and information
- Vertical and horizontal linkages

- Types of contractual arrangements, bargaining power, market shares of competing channels within a VC and returns for different stakeholders along the chain
- Regulations, policies, and laws
- Infrastructure and technologies
- Social norms, traditions, and customs that affect production and trading arrangements.

As part of this first phase, the team will systematically review the activities of IFAD and other donors related to rice, cassava, and horticultural value chains in the selected countries, paying special attention to understanding how projects and programs do or do not promote involvement of poor smallholders, women, and youth. The examination of project and program activities will help identify the contexts and types of partnerships, public investments and enabling policies that could potentially increase inclusiveness in value chains along with improving food security and encouraging sustainable practices.

This planning and review phase is critical since it will provide information on the key actors to meet with and data gaps to fill in during the field study phase. This first phase of the research project will lead to the conceptual framework paper and to seven preliminary value chain maps (1- Rice VC in Mali; 2- Rice VC in Guinea, 3- Cassava VC in Benin, 4- Onion VC in Mali; 5- Cabbage VC in Mali; 6- Tomato VC in Mali). The second phase of activities will take place after discussion with IFAD to receive its feedback on the conceptual framework.

3.2 Field Study Phase (October 2012 – April 2013)

MSU campus- and Bamako-based staff, along with local partners will conduct rapid reconnaissance surveys in October/November to get overviews of each value chains' organization, operation, and performance. IFAD staff will also be encouraged to participate.

These scoping visits together with the review of literature will deepen our understanding of the value chain dynamics and horizontal and vertical linkages, as well as constraints and opportunities, which will be more intensively examined during follow-up visits in February to April 2013. The team will use the information collected during the reconnaissance phase to update value chain maps and to design questionnaires for interviews with key actors. The questionnaires will capture information on the structure and governance system in value chains (see the list of elements described in the planning and review phase), which is essential to assess inclusiveness systematically and to draw recommendation on how to foster it.

In the next round of field work, the team will conduct interviews with key actors, such as farmers, input dealers, bankers, transporters, processors, wholesalers, retailers, and consumers. Other key informants may include state representatives from the Ministry of Agriculture, donors, and NGOs and representatives of cooperatives, professional and interprofessional organizations. The team will play special attention to factors affecting the participation of poor smallholder

farmers, women, and youth along the value chain as well as their benefits from participating. Information from key informant interviews will also be used to examine where IFAD target groups could potentially become more involved in off-farm activities along agricultural value chains.

These interviews will provide insights on who is likely to be able to participate and benefit, both as farmers and as workers in other states of the value chain, and perhaps more importantly, who is likely to be excluded. They will also provide information on the types of measures that could be implemented to increase the ability of poor rural populations, particularly poor smallholder farmers, women, and youth, to both engage and benefit from value chains as well as how specific value chains can be structured to improve inclusiveness. For instance, it will shed light on the types of investment and support needed to help youth to participate in production activities but also in downstream and upstream activities along value chains. The information collected will be used to examine factors that affect value chain competitiveness and how the organization of activities at each level of the value chain can be restructured to increase competitiveness and inclusivity simultaneously.

The team will use the data collected through secondary sources and interviews to translate the conceptual framework document into an operational tool, pinpointing major bottlenecks in the value chains studied and drawing implications for needed technical and institutional changes. The analysis will also focus on factors that affect value chain competitiveness and how the organization of activities at each level of the value chain can be restructured to increase competitiveness and inclusivity simultaneously. The final expected outcome will be a set of insights and recommendations that are both specific to the value chains examined in the Benin, Guinea, and Mali case studies and more broadly applicable to value-chain development efforts elsewhere in Africa

3.3 Write up Phase (May 2013-September 2013)

This work will lead to the publication of four case-study reports. Each report will encompass a literature review, a description of the key actors interviewed and of the value chain structure and dynamics (including maps), analysis of inclusiveness in value chains through the application of the conceptual framework, a discussion of the main constraints and opportunities faced by the target poor rural populations, and conclusions on how programs could be designed to promote inclusiveness in value chains.

In addition, four policy briefs focusing specifically on the types of investments and interventions needed to foster smallholders, women, and youth participation and to enhance their benefits from participating in each of the value chain studied will be written. These will be available in both French and English.

The team will also produce one comparative report on the similarities and differences across countries and value chain commodities along with one brief highlighting those comparisons and their implications for policy.

3.4 Outreach Phase (Continuous throughout the life of the project)

Translating the results of the studies into increased effectiveness of IFAD-financed value-chain development projects and programs will require a broad dissemination of the research results. The project will do this through a robust program of policy outreach. Outreach efforts will include multiple channels: case study reports, policy briefs, website, articles in the popular press, workshops and regional and international meetings. More specifically,

- From the start to the finish of this project, IFAD country teams and their partners will be invited to participate in all activities and to give feedback in order for them to be able to take ownership of the results.
- Upon the approval of the proposal, a project website was launched (<http://www.aec.msu.edu/fs2/IFAD-WA/index.htm>). All project research and outreach documents (e.g., conceptual paper, reports, and policy briefs) along with other relevant documentations will be made available on the website, which will be regularly updated.
- As draft reports are completed, the MSU team and local partners will organize national workshops to present, discuss, and validate key research results to value chain actors and policy makers in each country.
- The team will seek out opportunities to diffuse key research findings in the popular press in each study country. For example, members of the press will be invited to participate in the national workshops and will be provided summaries of key findings.
- This project will lead to publication of 5 reports and 5 policy briefs, which will be diffused through the MSU Food Security quarterly listserv.
- The team will exploit opportunities to make presentations to regional and international meetings as a way to further disseminate key results. This will include formal and informal presentations to IFAD staff in Rome. The MSU team will also make its results available to colleagues in the ECOWAS Commission for Agriculture, the Environment and Water Resources as it implements ECOWAP, via MSU's involvement in technical support to ECOWAP via the Rural Hub in Dakar.

Table 1. Expected Research Outputs, Timeline and Milestones

	Deliverables	Countries	Timeline/Milestones
Planning and Review Phase			
Review of literature and secondary data collection			
a. Inclusiveness in Value Chains	1 conceptual framework paper	A general conceptual framework will be developed and then applied to all three countries.	July-August 2012 <ul style="list-style-type: none"> • Conceptual framework paper in July/August • Feedback from IFAD on the conceptual framework in August
b. Rice		Mali and Guinea	September 2012
c. Cassava		Benin	September 2012
d. Horticulture		Mali	September 2012
Contacts with Local Partners		All three countries	August-September 2012
Field Study Phase			
Rapid Reconnaissance			
a. Rice		Mali and Guinea	October/November 2012
b. Cassava		Benin	October/November 2012
c. Horticulture		Mali	October/November 2012
Key Informant Interviews			
a. Rice		Mali and Guinea	February-April 2013
b. Cassava		Benin	February-April 2013
c. Horticulture		Mali	February-April 2013

Targeted Supplemental Data Collection			
a. Rice		Mali and Guinea	February-April 2013
b. Cassava		Benin	February-April 2013
c. Horticulture		Mali	February-April 2013
Write up Phase			
Reports			
a. Rice	2 reports	Mali and Guinea	May-August 2013
b. Cassava	1 report	Benin	May-August 2013
c. Horticulture	1 report	Mali	May-August 2013
d. Comparative	1 report	All three countries	August/September 2013
Policy Syntheses			
a. Rice	2 reports	Mali and Guinea	May-August 2013
b. Cassava	1 report	Benin	May-August 2013
c. Horticulture	1 report	Mali	May-August 2013
d. Comparative	1 report	All three countries	August/September 2013
Outreach Phase			
Website	Website to include all project research and outreach documents	For all three countries	Website set up in May 2012 and regularly updated.
National Workshops	Presentations to key national and regional stakeholders	For all three countries	July-August 2013
Regional and International Meetings	Policy outreach/ presentations	To be identified	Throughout the life of the project

Table 2. Project Activity Calendar, 2012-2013

Activities	Year 2012		Year 2013		
	Quarter				
	1	2	3	4	5
	July- Sept	Oct- Dec	Jan- March	April- June	July- Sept
Planning and Review Phase					
Review of literature					
Value Chains and its Applications	X				
Target groups	X				
Rice	X				
Cassava	X				
Horticulture	X				
IFAD and other donor projects	X				
Secondary data collection	X				
Development of the conceptual framework	X				
Proposed plan for field investigation	X				
Contact with local partners	X				
Field Study Phase					
Rapid reconnaissance					
Cassava- Benin		X			
Horticulture- Mali		X			
Rice- Mali		X			
Rice- Guinea		X			
Key informant interviews					
Cassava- Benin			X	X	
Horticulture Mali			X	X	

Rice- Mali			X	X	
Rice- Guinea			X	X	
Supplemental Data Collection					
Cassava- Benin			X	X	
Horticulture- Mali			X	X	
Rice- Mali			X	X	
Rice- Guinea			X	X	
Write up Phase					
Preparation of reports					
Cassava- Benin				X	X
Horticulture- Mali				X	X
Rice- Mali				X	X
Rice- Guinea				X	X
Comparative				X	X
Preparation of policy syntheses					
Cassava- Benin				X	X
Horticulture- Mali				X	X
Rice- Mali				X	X
Rice- Guinea				X	X
Comparative				X	X
Outreach Phase					
Website	X	X	X	X	X
National workshops					
Benin					X
Mali					X
Guinea					X
Regional and international meetings	X	X	X	X	X

Appendix A.

Value Chain Selection

Criteria	Value Chains				
	Rice	Millet/Sorghum	Cassava	Maize	Horticulture
Size (production and consumption)	+	+	+	+	+
Growth Potential	+		+	+	+
Employment and Income Potential	+	+	+		+
Target poor, women, and youth	+	+	+		+
Generalizability	+				+

Appendix B.

Country Selection Matrix

Country	Selection Criteria								
	IFAD Interest	Value Chain Importance					Data Availability	Local Collaborators	Regional Spillovers
		Rice	Millet/Sorghum	Cassava	Maize	Horticulture			
Mali	+	+	+			+	+	+	+
Ivory Coast	+	+		+	+	+		+	+
Cameroon		+		+		+			
Guinea	+	+				+		+	+
DRC	+	+		+		+			
Benin	+	+		+	+	+	+	+	+