



**The World Bank**

Côte d'Ivoire Economic Inclusion into Value Chains (P163814)

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# Economic Inclusion into Value Chains pilot (P163814)

## Côte d'Ivoire (AFRICA)

World Bank

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## 1. Context

Jobs are the cornerstone in the alleviation of poverty and the promotion of shared prosperity.<sup>1</sup> But improving labor market outcomes for the poor remains a challenge. Many jobs programs have targeted urban youth and focused on training, counseling and job search assistance. Yet, they often face limited demand for the goods and services that youth could produce. Also, the extreme poor often live concentrated in the rural areas. As a result, the effect of such labor supply side-oriented programs has been disappointing, both in terms of labor market outcomes and poverty reduction.<sup>2</sup>

In parallel, economic inclusion (EI) programs build on cash transfers programs to assist the poor to raise their earnings. They build on the (BRAC related) Graduation approach, which supports extreme poor and vulnerable households to develop sustainable livelihoods.<sup>3</sup> As the standard (youth) employment interventions, they focus on overcoming labor supply side constraints. Interventions usually include social assistance to ensure basic consumption, skills training, seed capital or access to employment opportunities to jump-start an economic activity, financial education and access to saving options, and mentoring to build confidence and reinforce skills. While they have had some success<sup>4</sup>, doubt remains whether the early gains can be scaled up and sustained. Without simultaneous market development, local demand risks to be saturated quickly.

This is giving rise to a call for more integrated approaches that simultaneously address constraints on the labor supply and the labor demand side. Imparting skills in an environment constrained by demand for goods and services, and thus labor, has limited potential. Similarly, support to business or firm expansion (a typical labor demand side intervention) quickly runs into problems when adequate labor is lacking.

Two examples of an integrated approach to job generation are territorial and (agricultural) value chain development. Territorial approaches focus on coordinating labor supply and demand side interventions within a certain area or region. Value chain development (VCD) approaches organize integration around a product. Product demand can often be developed or is latently present. It requires overcoming coordination failures and simultaneous support to the different actors in the chain (producers, processors, distributors).

However, success of the integrated approach is by no means assured. Integration can generate important synergies, but also increases complexity, which challenges effective implementation.<sup>5</sup> Fair distribution of the value added can also pose a challenge. Not all integration models are equally labor intensive and inclusive. Finding the right balance is key.

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<sup>1</sup> World Bank. 2012. *World Development Report 2013: Jobs*. Washington, DC: World Bank.

<sup>2</sup> Kluve, J., Puerto, S., Robalino, D., Romero, J.R., Rother, F., Stöterau, J., Weidenkaff, F., Witte, W. 2016. Do Youth Employment Programs Improve Labor Market Outcomes? A Systematic Review.

<sup>3</sup> Partnership for Economic Inclusion - Increasing the Income Earning Opportunities of Poor and Vulnerable People, 2017.

<sup>4</sup> Banerjee, A., E. Duflo, N. Goldberg, D. Karlan, R. Osei, W. Parienté, J. Shapiro, B. Thuysbaert, and C. Udry. 2015. "A Multi-Faceted Program Causes Lasting Progress for the Very Poor: Evidence from Six Countries." *Science* 348 (6236): 1260799-1-1260799-16.

<sup>5</sup> Brummitt et al., 2017, Contagious disruptions and complexity traps in economic development, *Nature: Human Behavior*, 1: 665-672.



To analyze the potential of integrated approaches to the jobs challenge, the Jobs Multi-Donor Trust Fund (MDTF), administered by the World Bank's Jobs Group, seeks to evaluate the effectiveness of a series of pilots that simultaneously address labor supply and demand side constraints. The overall objective is to demonstrate proof of concept of the integrated approach and generate generalizable lessons and scalable approaches to inform the next generation of employment and poverty alleviation interventions. One such pilot takes place in Côte d'Ivoire. Given the large share of youth and poor working in agriculture, and the country's agricultural potential, the pilot focuses on agriculture. Integration of labor supply and demand side in the agricultural sector typically happens through a value chain, thus the focus of the pilot on value chain development.

The Government of Côte d'Ivoire supports such an approach in the rice value chain. Rice is a strategic and labor-intensive crop, grown across the country, mainly in rainfed conditions. Yet, while the domestic rice production continues to rise, so does consumption and more than half of current consumption remains being imported. This largely follows from the poor quality of domestic rice, which is linked to poor post-harvest handling and poor milling conditions, and a lack of access to liquidity by the millers, as well as limited productivity following limited input adoption, and poor coordination by the farmers. The National Rice Development Agency (ADERIZ) is seeking to boost quality rice production in Côte d'Ivoire by supporting milling facilities, which in return are expected to support (smallholder) farmer organizations with agronomic advice and access to inputs to boost production.

Against this background and following an extensive consultation process, the Jobs pilot was associated to the Côte d'Ivoire Productive Social Safety Net project (PSSN). The PSSN project lays the foundations for a platform to deliver basic immediate consumption support and employment-enhancing measures to the poorest households in Côte d'Ivoire. The PSSN provides quarterly unconditional cash transfers through mobile money accounts to 50 000 poor households, selected through proxy-mean testing and community validation within randomly selected villages in 16 regions of Côte d'Ivoire. Another 75,000 households are being added in 2020.

The cash transfer beneficiaries will further be offered livelihoods support through an Economic Inclusion (EI) Package. The package focuses on a combination of supply-side measures such as the establishment of savings groups, basic entrepreneurship training and small business grants. Where possible, it will be complemented with measures to facilitate access to existing, local markets.

The PSSN project seeks to leverage additional approaches to increase beneficiaries' economic livelihoods. The Jobs pilot helps inform such approaches by exploring the potential of economic inclusion of poor households into value chains. The VCD approach differs from the EI Package described above in that it simultaneously addresses labor supply and demand side constraints. In the approach, market development (i.e. the demand for goods, and thus labor) and measures to increase labor productivity (and reduce poverty) (i.e. labor supply) go hand in hand and are mutually reinforcing.

The *rice* value chain was selected to test proof of concept of the VCD approach to promote economic inclusion for a number of reasons. Rice production is labor intensive, and it is widely grown by the PSSN project beneficiaries across its intervention area. There is substantial scope for increasing labor productivity in rice production and job generation off the farm, along the chain (in production, processing,



marketing, transport, input supply, mechanization services etc.). In Côte d'Ivoire, the national rice strategy is built around the integrated VCD approach, which the pilot seeks to test. And from a macro-economic point of view, rice is highly strategic, given the high import substitution potential, both in Côte d'Ivoire, but also in the rest of West Africa. Côte d'Ivoire's rice consumption rose to 2 million tons in 2013 (twice the amount in 2000). Imports have consistently supplied more than half of it (60 percent in 2013). Yet, detailed calculations by the National Rice Development Agency, following extensive consultations with all stakeholders in the chain, show that it could be produced competitively at home.

## 2. Development objective

The Côte d'Ivoire Economic Inclusion into Value Chains Pilot seeks to test proof of concept of an integrated jobs approach to poverty reduction. Such approach simultaneously tackles labor supply and demand side constraints to raise the incomes of the poor. Within the context of this pilot, the focus is on developing the rice value chain through support to rice processing units (labor demand side intervention) and the economic inclusion of poorer smallholder households within the chain (supply side intervention).

In comparing labor market and poverty outcomes with those obtained without VCD or cash transfers through rigorous impact evaluation, the activity aims to: (I) test proof of concept of the integrated approach in improving labor market and welfare outcomes for the extreme poor; (II) identify the potential of synergies (e.g. through cash transfer and VCD); and (III) discuss VCD potential in reducing poverty vis-à-vis alternative approaches (cash transfer, economic inclusion intervention, etc.). The findings will contribute to the body of knowledge on employment and poverty reduction programs in general, the design of future cash transfer and economic inclusion operations in Côte d'Ivoire and elsewhere, as well as the design of (rice) value chain support interventions in Côte d'Ivoire and other West African countries.

## 3. Piloting regions and project beneficiaries

The pilot intervenes in 3 regions: Tonkpi, Poro and Tchologo. The regions were selected based on the share of PSSN project beneficiaries already cultivating rice; the availability of an operating rice mill and a regional UNACOOPEC branch; and water availability for rice production in the region.

The pilot works with one rice mill in each region that has the capability and ambition to play a catalytic role in developing the value chain in an inclusive manner. The pilot focuses on rice mills with a processing capacity of 1 to 2 tons of paddy rice per hour. They are closer to the smallholder farmers than the mills with a processing capacity of 5 tons per hour, which have been the focus of the government. Yet, they allow to process high quality white rice that meets the quality requirements of the urban market and can compete with imported rice, unlike mills with a processing capacity below 1 ton per hour.

The three rice mills the pilot is working with were selected following an in-depth assessment by a Consortium of the *Centre International de Développement et de Recherche (CIDR)* and the *Centre de Promotion de la Micro-Industrie et du Développement Rural (CPMI-DER)*. The assessment focused on business performance, marketing capacity and the ability to act as a catalyst in the project design. The selection of rice mills to work with was validated by a consortium of partners working on the pilot.





### **Component 1: Support package for farmers to improve productivity and enhance market access**

This component focuses on addressing labor supply side constraints. It offers smallholder farmers (i) organizational support; (ii) access to finance for input purchase; and (iii) extension services to improve productivity and enhance market access.

#### ***Organizational support:***

Beneficiary farmers are linked with a close-by rice mill through a production contract. The contract states the farmer's commitment of producing rice for the mill and the mill's commitment of buying paddy rice at a set price at harvest. The mill's Producer monitoring officer (*Chargé de suivi des producteurs*) supports the development of a commercial interest group (*Groupements d'intérêt commerciaux*) among contracted farmers in each beneficiary village. It allows farmers to share knowledge on rice production and group their paddy rice for collection, and the mill to lower transaction costs in working with smallholder farmers.

#### ***Access to finance for input purchase:***

The pilot facilitates access to a loan for input purchase for beneficiary farmers from the UNACOOPEC. UNACOOPEC is a local microfinance institute with branches throughout Cote d'Ivoire. It partners with the pilot to expand its presence in the agricultural sector. In a first step, producers open a bank account at the regional COOPEC branch. In a second step, producers submit a loan request for input purchase, such as seeds, herbicides and fertilizers that is being vetted by the COOPEC branch.

#### ***Extension services:***

Beneficiary farmers are offered extension services to ensure the correct application of inputs and modern production, harvest and post-harvest techniques. These services include trainings on agronomic techniques, as well as an introduction to basic book keeping. The services are offered by the mill's Producer monitoring officer as well as SPV, an external service provider contracted by the pilot.

### **Component 2: Support package to rice mills to improve milling capacity and enhance market access**

This component focuses on addressing labor demand side constraints. It offers selected rice mills units (i) access to working capital on commercial conditions; and (ii) training on management and marketing practices to improve milling capacity and enhance market access.

#### ***Access to working capital:***

The pilot facilitates access to working capital for participating mills from the UNACOOPEC. By connecting rice mills with the regional UNACOOPEC branch, the pilot addresses the mills' liquidity constraints. Additional working capital allows mills to buy larger volumes of paddy rice from its farmers and pay them cash at harvest. With a steady supply of quality rice, mills are expected to be able to serve larger markets in urban areas with higher quality requirements and obtain a higher price. This in turn allows them to offer a better price to the farmers and thus an incentive compatible contract.

#### ***Training on management and marketing practices:***

The owners and employees of the selected mills are offered business management, marketing, financial management and technical operation trainings:



(a) The first type of training aims to structure the supply of paddy rice through cooperation with farmers. It mainly concerns the mills' Producer monitoring officer (*Chargé de suivi des producteurs*), and to a lesser degree, the owner.

(b) The second type of training aims to improve the company's management, the technical operations and marketing. It addresses the mills' owner and the accountant.

(c) The third type of training aims to strengthen the mills' owner's management capacity (business plan development as well as management of human resources, quality, business partnerships, including with banks and wholesalers etc.).

The trainings are delivered by a Consortium of the *Centre International de Développement et de Recherche* (CIDR) the *Centre de Promotion de la Micro-Industrie et du Développement Rural* (CPMI-DER).

### **Component 3: Analytical work, project management, monitoring, evaluation and dissemination**

This component supports the implementation and monitoring of pilot-related activities and the evaluation of project outcomes. It entails (a) preparatory analytical tasks; (b) project management; (c) coordination among actors involved in the implementation of the pilot with a field coordinator based in Abidjan and a decentralized coordinator in each piloting region; (d) monitoring and reporting on pilot results; (e) impact evaluation to measure project effectiveness on beneficiary outcomes; and (f) dissemination of findings.

## **6. Impact evaluation design**

The Economic Inclusion into Value Chains pilot is accompanied by an impact evaluation (IE). The first set of research questions arise from identifying whether implementing the Cash Transfer (CT) program and the Jobs pilot separately have a significant and substantial effect on the target audience. The more innovative research question is whether there are synergetic effects by combining the VCD with the CT program. The IE's core hypothesis is that an integrated CT and VCD approach creates synergetic effects on the income of poor rural households. The IE will also allow to compare the (relative) impact of the 3 approaches vis-a-vis each other.

Impacts are measured in terms of household income and through the different mechanisms of each component. The VCD approach affects rice production, rice income and agricultural income directly. Indirect effects are agricultural labor and land (re-)allocation, non-farm employment activities, etc. The CT intervention directly increases household income, but (might) indirectly affect households' human capital, technical skills, entrepreneurship, savings, aspirations, etc.

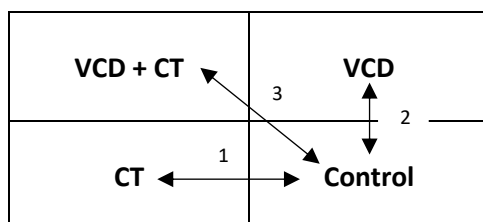
The Jobs pilot being interested in the direct and complementarity effect of aligning two interventions, 4 treatment groups were set up:

- 1) VCD+CT: villages that participate in the VCD intervention and benefit from CTs
- 2) VCD: villages that participate in the VCD intervention only
- 3) CT: villages that benefit from CTs only
- 4) Control: villages that do not participate in any of these two interventions

To address the research questions, three comparisons are being made:



- 1) To measure the effect of the PSSN intervention: compare CT villages with control villages
- 2) To measure the effect of the VCD intervention: compare VCD villages with control villages
- 3) To capture the synergetic effect of the PSSN and VCD intervention: compare VCD+CT villages with control villages, and compare the effect of the joint intervention with the sum of the average effects of the individual interventions.



The (random) assignment of the interventions is defined at village level, where two criteria are applied: 1) the village is beneficiary of the CT intervention or not; and 2) the village is within the catchment area of a rice mill that is supported by the pilot or not.

		Type of PSSN village	Village in catchment area of rice mill that is
<b>Treatment Groups</b>	<b>1) VCD + CT</b>	Beneficiary	Supported by VCD
	<b>2) VCD</b>	Control	Supported by VCD
	<b>3) CT</b>	Beneficiary	Not Supported by VCD
	<b>4) 0</b>	Control	Not Supported by VCD

The population of individuals on which the research questions are tested is the sub-sample of households in each village that are eligible for receiving a cash transfer. This means that they represent the 40% poorest households in the region (based on a Proxy Mean Test and using a regional cut off value of X). Within beneficiary PSSN villages, CT beneficiary households were identified through a PMT at the household level and a community validation process.

The following steps were undertaken in the design of the impact evaluation:

- 1) Determining the sample size using power calculations
- 2) Sampling of VC+CT and VC villages in intervention area of pilot
- 3) Sampling of CT and control villages in control region

The baseline data collection took place in Summer 2019. The endline data collection is expected to take place in Summer 2021. Rapid beneficiary surveys and administrative data collected by the implementing partners of the Jobs pilot allow to monitor progress over time.

Other research questions that will be examined include:

- Determination of participation in contract farming;
- What determines the success of the *Groupements d'intérêt commerciaux* that have been formed;
- The economics of rainfed and bas-fond rice;
- Dynamics of rural labor markets (spatial difference in wages, seasonality of labor needs, etc.);
- Profitability of rice processing firms;





- Earnings potential along the chain.

#### 7. Published blog posts

The piloting team has published a series of blog posts on the Economic Inclusion into Value Chains pilot:

[Unveiling new paths to create more Jobs for the Poor](#)

[Rising with rice in Côte d'Ivoire 1: How local farmers and millers are leading the way](#)

[Rising with rice in Côte d'Ivoire 2: More and better jobs by connecting farmers to markets](#)

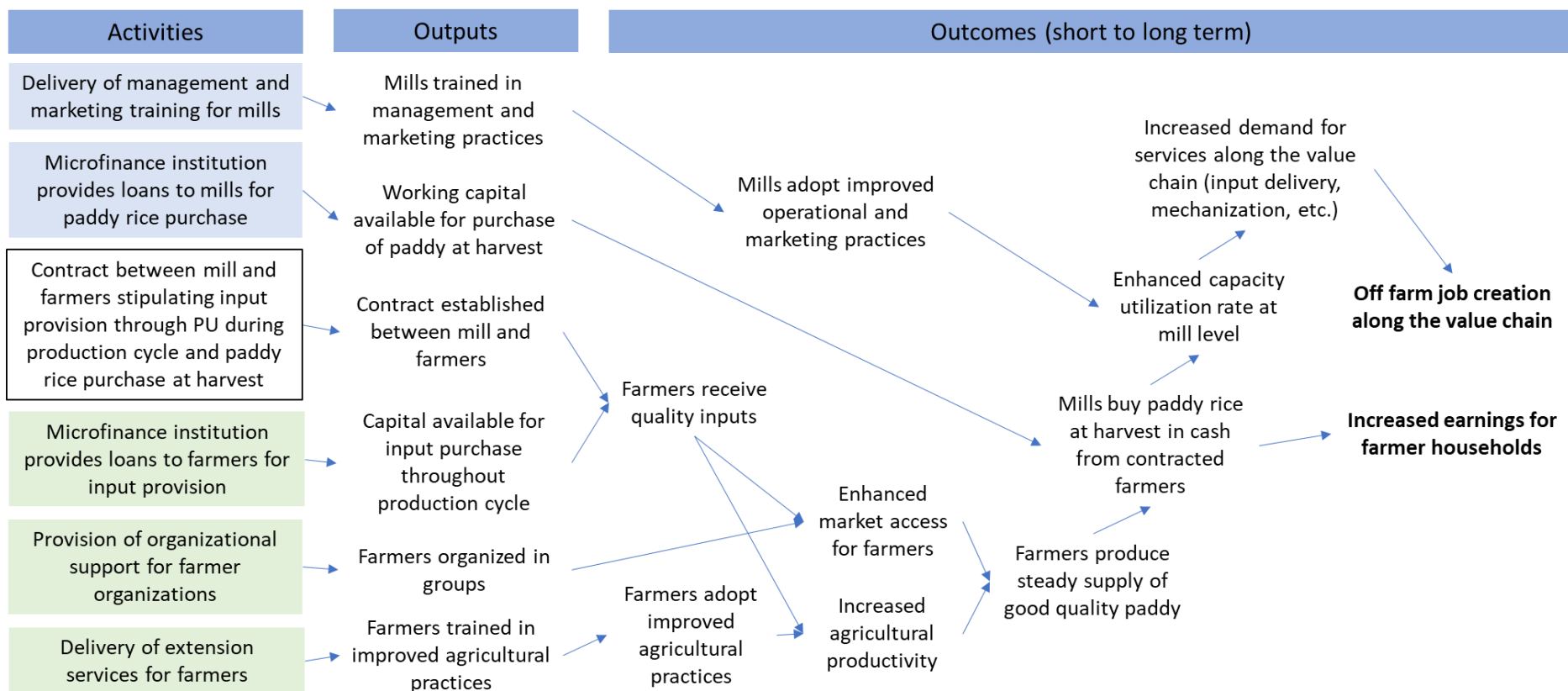
[Rising with rice in Côte d'Ivoire 3: The contours of a pilot project](#)

[Rising with rice in Côte d'Ivoire 4: Rice in Côte d'Ivoire is Big Business That Depends on Small Firms](#)





### 9. Theory of change



**Underlying Assumptions:**

- All involved parties (PUs, farmer organizations, microfinance institution) comply with the agreement
- Weather conditions are favorable to rice production
- Sustainable increase in agricultural activity and use of chemical inputs prevents environmental degradation or health hazards
- PUs operate without major disturbances (absence of electricity cuts, equipment failures, etc.)
- Adequate transport system to deliver paddy rice from farmer organizations to PUs and from PUs to market
- Stable security, political and macroeconomic environment

Labor supply-side activities

Labor demand-side activities