



SUPPORT INNOVATIVE MARKET LINKAGES IN CAMBODIAN RICE VALUE CHAIN

31 January, 2018

AUTHORS: JEAN-MARIE BRUN, LAURENT LIAGRE, IRAM¹



CONTENT

1. Context.....	2
2. Justification for proactive policies and measures to support innovative market linkages in rice value chains	3
3. Lessons learnt from pilots implemented by SCCR project.....	4
4. Policy Recommendations.....	7
Annex 1: Interests and Limits of Contract Farming.....	13

ACRONYMS

AC	Agricultural Cooperative	MAFF	Ministry of Agriculture, Forestry and Fisheries
ADB	Asian Development Bank	MEF	Ministry of Economy and Finances
AFD	<i>Agence Française de Développement</i>	NF3	National Farmer Organization Federations' Forum
CF	Contract Farming	PDAFF	Provincial Department of Agriculture, Forestry and Fisheries
COrAA	Cambodia Organic Agriculture Association	PGI	Protected Geographical Indication
CRF	Cambodian Rice Federation	PMUAC	Preah Vihear Meanchey Union of Agricultural Cooperatives
DACP	Department of Agriculture Cooperatives Promotion (/MAFF)	PTP	Paddy Trading Platform
DAI	Department of Agro-Industry (MAFF)	RDB	Rural Development Bank
EBA	Everything But Arms	SCM	Supply Chain Management
FO	Farmer Organization	SNEC	Supreme National Economic Council
FWUC	Farmer Water User Community	SCCRP	Support to the Commercialization of Cambodian Rice Project
ICS	Internal Control System	SRP	Sustainable Rice Platform
ICT	Information and Communication Technologies		
IRAM	<i>Institut de Recherche et d'Application des Méthodes de Développement</i>		

¹ www.iram-fr.org

1. CONTEXT

1.1. CAMBODIAN AGRICULTURE: A PROGRESSIVE INCREASE OF MARKET ORIENTATION

Whereas a couple of decades ago, Cambodian agriculture was still mainly a subsistence activity, it has now become more commercial, even if small-holder farms are still predominant.

More specifically for rice production (as Cambodia main staple food), in areas mainly rain-fed and for many smaller farms, rice production is still largely dedicated to self-consumption, and serves only partially to generate monetary incomes. However, for farmers households who are facing urgent need for cash (notably to reimburse loans) it is not uncommon that most of the paddy is sold at the harvesting period, even if the prices are low and if the production is not sufficient to cover the family annual needs. As such, rice sale during the wet season harvest often represents the major source of incomes for those farmers.

In areas where irrigation is available, one may consider that the problematic of rice is quite different for farmers. Irrigated paddy production in dry season is generally more intensive, and farmers often get higher yields, cultivate larger areas, and are more commercially oriented than those cultivating in wet season only (ADB 2014). As a consequence, dry season paddy production responds to price changes more quickly than wet season paddy production which is in larger part dedicated to self-consumption (ADB 2012).

1.2. KEY FEATURES OF CAMBODIAN RICE SUPPLY CHAIN ORGANIZATION

To a large extent, the current structure of the supply chain in Cambodian rice sector is characterized by a large number of smallholder farmers who grow the paddy, then a variety of actors involved in the collection of paddy (local collectors / middlemen), supplying millers directly or via bigger wholesalers. Millers may then sell the rice to exporters (if they do not export themselves) or wholesalers, who supply retailers on the domestic market.

The supply chain relies mainly on actors interfaces at each level, based on bi-partite negotiation (each stakeholder being connected only to a limited number of actors at level $n-1$ and $n+1$ in the supply chain) but generally without a more comprehensive / optimized system throughout the value chain. This atomization of the production and number of intermediary makes it difficult at the same time to be competitive on prices for rice as a commodity and even more difficult to ensure high quality standards and differentiation of Cambodian rice as a quality product.

Moreover, these modes of organizations disconnect farmers from the markets outlets. They remain largely unaware about the final value at which the rice will be sold, and about prices offers by other buyers beyond their localities. Moreover, in some case, there might be some collusion practices among paddy buyers to maintain relatively low prices. Hence, some results of the analysis based on economic models of Cambodian rice value chains tend to show that millers could afford to pay a bit higher prices for paddy, and yet remain profitable², which can be considered as an indicator of the limits of farmers bargaining power.

1.3. OTHER TRENDS: RECENT DEVELOPMENT OF FARMER ORGANIZATIONS AND EXPERIENCES OF CONTRACT FARMING

Whereas smallholder farms are still predominant in Cambodian agricultural landscape, the development (yet still embryonic in many cases) of Farmer Organizations (Agricultural Cooperatives³, Agricultural Cooperative Unions⁴, Farmer Water User Communities and others...) opens perspectives of improvement of farmers connection to markets, with in particular i) a capacity to aggregate production and thereof skip local collectors to connect directly to larger buyers (or rice millers for the case of rice), and ii) by gathering producers themselves, the possibility to produce according to specifications required by buyers. This last element is highly necessary when it comes to enhance a specific quality or to match international standards.

² Cf. Table 6 (Rice milling profitability sensitivity to paddy purchase and milled rice selling price: return to cash invested for a 10MT capacity mill exporting Jasmine – System 08), in the draft of the 1st issue of the Cambodian Rice Sector Economic Observatory Bulletin (SNEC/MAFF/SCCRP).

³ 880 Agricultural Cooperatives registered by MAFF as of May 2017.

⁴ *Preab Vibear Meanchey Agricultural Cooperative Union (PMUAC)*, supported by SCCR project, was the first Union of Cooperatives officially registered by MAFF in July 2016. Since then, only few other Unions were registered to date, but there is a real potential here to aggregate more producers and reach a scale of Farmer Organization more likely to become partners for the agro-industry.

Contract Farming is not yet widely used in Cambodia agricultural supply chains. Yet, there has been a few interesting (and in some case successful) experiences in the recent years, including in the rice sector with the support of the SCCR project (see Section 3. below). Contract farming can be an appropriate way to develop new agricultural production, for which farmers may lack knowhow as well as access to a local market. For the case of rice in the Cambodian context (with numerous suppliers and buyers), Contract Farming is irrelevant if it is to produce conventional rice. But it proves to be an adequate way to ensure the compliance to specific quality standards in particular whenever it requires on-farm inspection, traceability and certification.

2. JUSTIFICATION FOR PROACTIVE POLICIES AND MEASURES TO SUPPORT INNOVATIVE MARKET LINKAGES IN RICE VALUE CHAINS

2.1. IMPROVED SUPPLY CHAIN MANAGEMENT: A MATTER OF COMPETITIVENESS FOR CAMBODIA

Cambodia agricultural sector has generated increasing volumes of paddy surplus since the last two decades, resulting from a combination of rice areas increasing, irrigated rice development and rice yield increasing⁵. From 2010, the policy for paddy production and rice export has provided a conducive environment for the development of the sector, while private sector has made significant investments in state-of-the-art milling facilities to process paddy and develop rice exports. These structural changes have resulted in an increased of milled rice exports from 12,000 tons in 2009 up to more than 540,000 tons in 2016. Yet, it is well acknowledged and documented that Cambodia's competitiveness is hampered by relatively low productivity and high energy and logistic costs⁶. This has been partly balanced by the special treatment of Cambodia regarding the access to EU market (thanks to the EBA initiative, in full application since 2012 for the Cambodian rice sector), which represented a large portion of Cambodian rice export destinations for the past few years (more than 60% in 2016)⁷... and also by relatively low prices paid to farmers, especially as international market prices were down in 2016.

Cambodia may thereof face difficulties to increase its exports and market share for generic white rice (traded as a commodity), in particular in an environment of low international market prices as it has been the case in 2016 and first half of 2017. This also explains why a major part of Cambodian paddy surplus is exported unprocessed.

The competitive advantage of Cambodian rice may rather lie in the production of differentiated (/high) quality⁸, either from high quality fragrant varieties, and/or from specific production standards requiring certification, such as organic rice or SRP rice (or possibly also fair-trade or Protected Geographical Indications labels). The context is particularly conducive for such strategies, the organic food world market having been multiplied by 5 within the last 15 years, reaching 75.7 billion € in 2015, while the market for Fairtrade certified products has grown six-fold since 2004, reaching 7.3 billion €⁹. Specifically, according to Ricepedia, the European demand for long-grain indica rice, exotic varieties such as basmati and jasmine rice and organic rice is growing by 6% annually.

But these various standards are requiring certification and verifications on the way paddy is produced, which imply traceability and on-farm verification. The way most of the Cambodian millers manage their paddy supply (i.e. from unidentified individual producers, via a network of local collectors + sometime another layer of middlemen) is not compatible with those requirements. To exploit the potential of these niche or premium markets, the challenge is thereof to switch to a much more integrated approach of the supply chain and a direct and long-term relation between producers and millers/exporters. This has been referred to as an improved "Supply Chain Management" (SCM) in the process of development of the new Cambodian rice policy¹⁰. Innovative pilots of Contract Farming supported by SCCR projects have proven relevance in this matter as we will briefly develop in Section 3.

⁵ According to various sources (MAFF, Ricepedia – <http://ricepedia.org/cambodia> – etc.) the rice cropping area has been expanding from about 1.9 million ha in 1995 to 2.8 million ha in 2010 and more than 3.0 million ha in 2016. Irrigated surfaces have also increased, as well as average rice yields (from less than 2 tons/ha before 1995, to more than 3 t/ha since the beginning of the current decade).

⁶ See notably: Aldaz-Carroll E., "Improving rice trade logistics to help reach 1 million tons export target", World Bank, 2014.

⁷ According to the Annual report (2016) of the Secretariat of the One-Window Service for Rice Export Formality (SOWS-REF).

⁸ See the joint publication of SCCR (AFD/SNEC) and IFC: "Cambodia Rice: Export Potential and Strategies", Cambodia Agribusiness series No.4, IFC, Phnom Penh, January 2015.

⁹ Helga Willer and Julia Lernoud (Eds.) (2017): The World of Organic Agriculture. Statistics and Emerging Trends 2017. Research Institute of Organic Agriculture (FiBL), Frick and IFOAM – Organics International, Bonn.

¹⁰ Process still on-going at the time this note is written.

2.2. AN OBJECTIVE OF INCREASED SHARE OF ADDED-VALUE FOR SMALLHOLDER FARMERS

Increasing exports (or even of export value) is not a final goal *per se*. A paramount objective of the Royal Government of Cambodia is to reduce poverty, which for the rice sector notably means to maximize the share of the added value reaching producers and to maximize their incomes in a sustainable way. As seen in Section 1 (page 2), the common structure of Cambodian rice value chain leaves farmers in a weak bargaining power position, or in other words mainly as price-takers.

On the contrary, as seen above, when value is added through the compliance with standard on the way paddy is produced (organic, SRP...), farmers are (or shall be) in a relatively better position as they are the ones who have control on the cropping methods. Negotiations of partnerships (CF) between farmers (ideally via Farmer Organization to reduce transaction costs and improve producers' capacity of negotiation) and millers/exporters can allow farmer to catch a fair portion of the added value generated through premium prices associated with the compliance to the specific production standards. To support the development of such long-term partnership between farmers and buyers (for rice but also for other agri-food products) is therefore doubly justified by the objectives of i) development of exports and competitiveness and ii) increasing farmers net incomes.

Yet, not all farmers and not all the rice production can be oriented to higher value niche markets (even if those markets continue to grow steadily in the future). Therefore, other measures, besides the Contract Farming model, can be envisaged to increase producers' exposure to more buyers and improve their bargaining power. The Paddy Selling Groups model and the Paddy Trading Platform (both tested by SCCR project – see below), are part of these innovative measures that can be further supported, improved and up-scaled.

3. LESSONS LEARNT FROM PILOTS IMPLEMENTED BY SCCR PROJECT

3.1. CONTRACT FARMING MODEL: A “MUST” TO REACH HIGH-END MARKET WITH CERTIFICATION REQUIREMENTS

In the context of Cambodian rice sector (with multitude of producers and buyers) Contract Farming does not show any advantage to sell or supply generic paddy, compared to the competitiveness and efficiency of the existing supply chain based on local collectors/traders. But Contract Farming has proven to be a relevant tool for two kinds of objectives:

- i) to introduce a major technical change, such as the introduction of a new variety otherwise unavailable on local markets for farmers and presenting an advantage for both producers and the contractor (Example: Case of the introduction of *Pbka Kravan* variety by Golden Rice – See SCCR Case Study paper #1);
- ii) as stated above, to start-up a long term partnership to source certified paddy (for any type of certification encompassing paddy cropping methods, such as organic or SRP rice...).

The experience developed with AMRU-Rice and Agricultural Cooperatives (then Union of Cooperatives) in Preah Vihear province is one of the most successful pilot innovative model developed by SCCR project (See SCCR Case Study paper #2). In this case both parties (the cooperatives and the rice miller/exporter) have an absolute need to secure their commercial relation: having deals to supply organic rice on export markets, the exporter has to make sure he will be able to source paddy from the very few Farmer Organizations which have an efficient Internal Control System (ICS) to ensure organic certification. On the other hand, Agricultural Cooperatives which are investing in this ICS have to be sure they will be able to sell their paddy to one of the very few buyer willing to pay a premium for certified organic product.

The purpose of this policy note is to reflect on the key supports / services that would have to be sustained and systematized to support replications of such initiatives and achieve the objectives of improved Supply Chain Management. As a preliminary step to develop “policy recommendations”, it is thereof necessary to identify “what made this success story possible”?

Besides the own commitment of the economic stakeholders involved (the farmers, their cooperatives and the miller/exporter engagements are obviously of paramount importance), the project has undertaken a number of roles and functions that have been essential for the process to be implemented and reach success. Notably:

- Assessment of the suitability of production area for organic (or other) standards requirements.

- Initial training / capacity building of farmers on organic production standards.
- Development of Internal Control System procedures and tools, and training of ICS inspectors, then of ICS supervisors at the Union of Cooperatives level.
- Facilitate the identification of partners, initial contacts (with several potential buyers) and preliminary negotiations.
- Accompany the process of contracts negotiations.
- Coaching of FOs in the negotiation, implementation and monitoring of CF agreements.
- Subsidize the costs of above services, including in a transitional phase, recurrent costs of internal control and internal control supervision (consolidation of all ICS data and liaison with the certification body)... but it is important to note that in the case of the Union of Cooperatives of Preah Vihear and their contract with AMRU-Rice (+ now Signature of Asia), the economic stakeholders are now in position to cover all these recurrent costs and sustain the whole system.

The technical support and capacity building to train farmers and elaborate capacities required to reach the expected level of certification is of primary importance, and is the one for which external inputs is the most necessary because required technical knowledge and capacities are particularly scarce in the country (for instance very limited human resources are available in Cambodia with a strong knowledge of international standards – such as EU or USA organic standards – and on the development of control and certification systems). Investment in human resources is essential if there is a will for Cambodia to position itself on such high quality and high value markets.

Regarding the facilitation of contract negotiation, the support was not directive or normative and let the stakeholders define and negotiate suitable terms for their partnership, yet trying to ensure that all key points are addressed in the contract. Also, in particular for the farmer side, a particular focus was given to the assessment of their ability to comply with the terms of the contract, and overall coaching and capacity building was provided at AC level and (even more) to the Union of Agricultural Cooperatives (PMUAC), which creation was decided by ACs as their chosen strategy to sustain the functions of supervision of internal control and liaison with the Certification Body (initially undertaken by COrAA as a contracted operator for SCCRП).

Development of such partnership between farmers / Farmer Organizations and companies has also to be understood as a medium or long-term process. Difficulties may be faced in the first year(s) of implementation, and it is important to set a spirit of cooperation and dialog and to monitor and discuss problems encountered. In the case of Contract Farming in Preah Vihear, difficulties were encountered in the early stage and were analyzed and discussed to search for solutions, leading to a progressive improvement and consolidation of the partnership for the benefit of both parties. For this purpose, a third party to facilitate the dialog is highly desirable and helpful.

3.2. EMPOWERING FOS TO TRADE FARMERS' PRODUCTION

The development of solid CF partnership between rice farmers and millers/exporters aiming at supplying paddy certified against specific standards is seen as the highest potential to increase added value of Cambodian rice. Even if this potential has to be exploited as much as possible by stakeholders of Cambodian rice sector, it will still not represent the major part of Cambodian rice production. For conventional paddy production (for which Contract Farming is not necessary), there is also a potential to consolidate Farmer Organization to act as commercial stakeholders in paddy supply chain and consolidate their capacities to identify and negotiate the best options to market their produces.

3.2.1. PADDY SELLING BY FOS

A limited number of initiatives of FOs involvement in paddy commercialization have been supported by SCCRП project, basically consisting in having Farmer Organization acting as collectors, yet with different variations in the models, level of organization and engagements (and variable results as well):

- “Paddy Selling Group” set up within Farmer Water User Communities, in some case associated with improved seeds use and detailed planning of harvest to ease paddy collection logistic for buyers;
- Agricultural Cooperatives gathering and selling paddy from their members;
- Paddy delivery contracts signed with millers (different from contract farming as they are signed only few days or weeks before harvest and determine only the conditions of transactions, collection, payments...)

Different cases are presented with more details in separate case study notes (See notably SCCR Case Studies #3 and #4).

Organizing themselves to get in touch with more buyers (and directly with large traders or millers) definitely contributes to increase farmers' bargaining power. In several cases, the FO managed to obtain better paddy prices for their members via these collective selling actions (compared to price offered by local collectors to individual farmers). But the difference was often relatively small¹¹. Yet, with the level of margin generated, in some cases FOs would be able to cover the management costs of collective paddy trading operations. But local traders tend to adapt to this competition of the FO on paddy purchase, and they tend to increase the price they offer to farmers and align with the ones offer by the FO. This can be seen as a positive effect... but it actually threatens the sustainability of the model: when collectors align their prices, farmers often stop to sell their paddy to the FO. As a consequence, the FO may suspend its activity of paddy trade, and once the FO stops to purchase, the local traders return to lower price offers. This remains a major challenge. Solutions could be explored, looking at a combination of technical and financial services to support rice production, provided by FOs to their members and linked with collective actions for paddy trade.

Moreover, it has to be acknowledged that support was provided to FOs to implement these activities as capacity building, coaching and facilitation to get in relation with buyers. The SCCR project has tried to localize this support at FO Federations level (notably Farmer Water Net, with the support of their regular partner, the "Irrigation Service Center", for Paddy Selling Groups under FWUCs). But at the limited scale reached up to now, these support costs cannot be fully recovered without some external funding.

In the short term, the sustainability/replicability of these actions is a difficult objective to achieve without a continuation of external support and sources of funds to cover the cost of this support. Yet we believe it would make sense to maintain such a support, as it progressively helps FOs to gain experience and capacities, and with a progressive increase in scale and improvement of internal capacities of FOs, a higher level of sustainability could be reached with time.

3.2.2. PADDY TRADING PLATFORM

In 2016, the SCCR has supported the development and deployment of the Cambodian Paddy Trading Platform. This was seen as a support tool for FOs engaged in paddy collection and selling, helping them to disseminate their supplying capacities (before each harvest) to a large number of potential clients "in one click". (Details about this experience are provided in SCCR Case Study paper #5). Basically the concept of the Paddy Trading Platform is that FOs post announcements of their upcoming harvest (type of paddy, volumes, etc...) and these announcements are transferred directly to registered millers by e-mail or SMS (or can be consulted on lines). Millers can sort announcement or set filters based on their preferred parameters (e.g. type of varieties, minimum volumes, location of FOs...).

The platform was deployed before wet season harvest 2016 (in late October), and is technically working. Yet, up to now, one must admit that it did not lead to many fruitful commercial contacts between FOs and millers. Yet some of the reasons for that have been identified and are being addressed, and also there might be some contextual factors since the test was implemented in a period of very low international prices and stagnation for Cambodian rice exports.

The SCCR Case Study paper on the PTP provides more details on the challenges and explores options to consolidate it and to ensure its sustainability, including about the institutional ownership and governance of the platform. It has to be noted that the concept of the PTP (proposed by SCCR) was initially discussed and fine-tuned during two workshops co-organized by SCCR team with CRF and FO Federations. CRF was first foreseen to own the platform (as being theoretically a common organization gathering both FOs and millers/exporters), but finally CRF has not accepted to contribute to set up the tool by providing (as it was requested) the contacts of all millers (members of CRF). On second thought, an institutional hosting under such an institution was probably not the best idea as prominent rice millers (who have a major influence in the Federation) have a certain influence on prices and do not necessarily see with a favorable eye the development of a tool which will expose paddy farmers to more potential buyers and thereof improve farmers bargaining position...

¹¹ In particular in 2016 and early 2017, while rice prices on international markets were quite depreciated and Cambodian rice exports were not in a phase of significant growth, while results were better for pilot operations that took place in 2015.

FO Federations are finally a better place to locate this service. They may not benefit of an immediate visibility and credibility from potential buyers, but with some support in a transition phase, this credibility has to be built by the quality and reliability of the service proposed and by reaching significant volumes.

3.2.3. FO INVESTMENTS ON DRYING AND STORAGE CAPACITIES?

SCCRP has commissioned a study¹² in 2016 to assess the feasibility (and profitability) of possible investments by Farmer Organization in drying and storage capacities, in order to be able to gather the production of members and store it to sell it later after harvesting season. On the principle, holding the paddy in well dried condition so it can be stored without losing its quality, reduce the emergency of selling for farmers, and on the principle shall put them in a better position to seek buyer and negotiate prices. Yet the study rather shows that in the current conditions, such investments by FOs would most likely not be viable. The uncertainty on the evolution of prices after harvest (the study considers the hypothesis of an increase of +20% of the value of paddy within 4 to 5 months of storage, which is still a quite speculative bet¹³) makes investments relatively risky. And a major bottleneck is the access to finance for FOs, as storing paddy means that a capital has to be immobilized. At current rate of loans to cooperatives (notably with the RDB credit offer dedicated to Farmer Organizations developed with the support of SCCR project) and with the too limited amount of cash flow credit (whereas significant volumes¹⁴ are needed to possibly reach the breakeven point), it is not likely that Agricultural Cooperatives could really undertake this role. Technical and economical relevancy of some other machineries investment might be explored, as long as they may constitute a collective mean to address certain structural constraints faced by farmers, as for example combine-harvesters or rice banks for food security.

4. POLICY RECOMMENDATIONS

Policy recommendations here are developed having in mind the two key elements presented in the Section 2. “Justification for proactive policies and measures to support innovative market linkages in rice value chains” above in this note, i.e. the double objectives of improving supply chain management to tap high quality niche markets, and to increase the added value captured by smallholder farmers.

4.1. A CONDUCTIVE PLAN IN FAVOUR OF QUALITY RICE SUB-SECTOR DEVELOPMENT (OR MORE BROADLY QUALITY ENHANCEMENT IN AGRICULTURAL SECTOR?)

One objective (which is part of the orientations of the current draft of the new Cambodian rice policy) is to position as much as possible Cambodian Rice on high value niche markets (such as organic, SRP, or possibly PGI or fair-trade...). As already stated above, such a sector is still very limited in Cambodia. Yet while numerous Asian neighboring countries have started to develop their own policies to foster the organic sector¹⁵, a specific national policy/plan for organic (or more broadly quality-certified) agricultural production would need to be elaborated in Cambodia. Beside environmental and health stakes, the objective here is to transform into realities the important potential of organic agriculture for export markets knowing it could have a strong inclusiveness and incomes distribution among small scale farmers.

This policy framework should embrace various components, such as the implementation of a network of research centers backed to demonstration organic farms throughout the country, the settlement of extension service specialized on organic agriculture, the development of capacity building program to build capacities for the

¹² Carlier Rodolphe Leang Khun Hak, “Feasibility study for a pilot project on investments by Farmer Organizations on paddy drying and paddy storage centers in Cambodia”, GRET, SCCR project, Phnom Penh, September 2016.

¹³ Such a variation can happen in certain years, and was observed in certain period (for example, the price differential of the annual minimum and maximum prices of rice is 19.4 percent for 2005–2010, excluding 2008 (higher for international contextual reasons – global food price crisis), as shown on World Food Program “Cambodia Food Market Analysis and Survey Report”, page 19 (available on: <http://documents.wfp.org/stellent/groups/public/documents/ena/wfp244779.pdf>). But variation of paddy prices might be less predictable in other years, and less and less predictable as Cambodia is getting more and more connected to international markets. From late 2015 to early 2017, paddy prices variation have been sporadically and strongly influenced by external factors, such as Thailand releasing its public stocks of paddy...

¹⁴ Not less than 3,000 tons of paddy according to the study, with different types of varieties (photosensitive and non-photosensitive in order to have a longer period of harvest and reduce the dimension of investments required for driers).

¹⁵ Helga Willer and Julia Lernoud (2017).

development of inspection and certification systems (which is needed not only for organic but also for PGIs or other standards...), the launching of a subsidy program targeting farms as well as enterprises intending to convert their conventional into organic system (investment, certification, etc), or also ensuring that quality labels such as organic are well identified in the “radar” or Cambodian institution in charge of market intelligence and prospection. This framework could also be completed with an operational plan giving details about priority regions, targeted producers types, areas and volumes.

4.2. SPECIFIC SUPPORT MEASURES RECOMMENDED FOR INTEGRATED SUPPLY CHAIN MANAGEMENT MODELS

As already stated above, such quality labels are all associated with requirements to be verified at producer level, and thereof this level of objective cannot be achieved without the development of strong and long-lasting partnerships between millers/exporters and farmers (similarly to the contract farming scheme developed for organic paddy in Preah Vihear province). As briefly explained in § 3.1. in this note, even with good intentions, economic stakeholders (millers/exporters and farmers) may face a lot of difficulties (and eventually may not succeed) in developing such partnership if they cannot get the right supports.

In paragraphs below, we are suggesting a number of specific tools and support measures that the Royal Government of Cambodia could possibly consider and integrate in a global policy in order to achieve the objectives of improved SCM and positioning of Cambodian rice on highest value markets.

4.2.1. FLEXIBLE FACILITATION TO CONTRACT FARMING INITIATIVES

A third party facilitation support should be made available for economic stakeholders who are willing to develop partnership on a contract farming model.

In the process of Contract Farming development, a third party support can be very helpful, at different stages:

- First in order to help the party which takes the initiative (most often the buyer) to **identify relevant partners**: Agro-food companies should be able to get support to identify suitable producers corresponding to the production criteria they wish to apply.
- Then to **facilitate the understanding and negotiation of the terms of the partnership**: a neutral third party can help to build trust and ensure that all key elements are discussed and clarified in order to avoid a risk of dispute over points that were left uncovered by contract terms.
- Finally to help to **follow up** and if needed to act as a **mediator** in case of conflict.

Different institutions can be mobilized to provide such service.

Primarily, MAFF services (notably DAI and PDAFF) should be allocated sufficient resources to offer such services (for free, covered by government budget or possibly projects). Resources should include qualified human resources and means to travel and implement work on the field. The SCCR project has developed a Manual on Contract Farming in Cambodia that can serve as a basis to train facilitators. But at DAI level, not all the relevant competences are available now. In particular: contract farming is first of all a matter of law, and DAI human resources at present do not include lawyers and have very limited basic understanding of law. This is a competence that could be aggregated to DAI current Human Resources.

It has to be well understood that:

1. What is needed is **not bureaucracy** (heavy and time consuming procedures, obligation to comply with standard formats, etc...) which would not be a support to the private sector (and thereof to achieve economic objectives) but would on the contrary be an obstacle to the development of Contract Farming.
2. **Contract farming is not an objective *per se***. It is only a possible tool, and it is not always relevant, in particular for undifferentiated paddy, paid at market price (See Annex 1).
3. Economic feasibility of the envisage partnerships, and benefit that can be reasonably expected for both parties (compared to their current situation) should be properly assess, without neglecting additional costs that the process will generate. **Advisory services have to be economically sound and business-oriented** (not dogmatic).

The attitude and work culture of officers assigned to this facilitation role shall be absolutely coherent with the above principles, which, to be honest, can represent a certain cultural challenge for MAFF services and management.

Other actors can also be mobilized for such support (which shall not a monopoly of MAFF), such as:

- The CRF, which, as an inter-professional body on the export rice sub-sector, could be proactive in the use of contract farming mechanisms among stakeholders in order to promote quality rice development¹⁶. This promotion action could associate as well the NF3 (National Farmer Organization Federation Forum), as long as this type of action fall into its objectives and action plans.
- the **Federations of Farmer Organizations** which can notably contribute to identify potential partners for the agro-food industry among their members.
- NGOs / projects, which can notably bring support in capacity building and results analysis.
- Consultant / brokerage service providers which may facilitate the linkage between farmers, buyers and suppliers, but also can facilitate credit transactions and other embedded technical and advisory services, and help farmers to organize themselves toward market-oriented strategy, etc...

4.2.2. CAPACITY BUILDING PROGRAM AND TRANSITIONAL SUBSIDIES FOR CONTROL SYSTEMS / CERTIFICATION

As stated in Sections 2.1. and 3.1. of the present note, the differentiation of Cambodian rice via high quality standards and certification is the area in which there is the higher potential to increase the value of the product and the competitiveness of Cambodia. The support to contract farming development is useful, but not sufficient. And to scale up or replicate experiences such as Preah Vihear organic supply chain development, it is an absolute necessity to support capacity building of farmers and support officers on high quality production standards (such as organic or SRP...) and on the way to control the compliance with standards. The availability of competent and experienced officers on these matters in Cambodia is far too scarce at the moment, and it is necessary to:

- At national level: develop and implement a training program on standards and inspection/certification processes. A set of modules could be developed and proposed to students as a specialization. The fast development of quality standards (organic, SRP, PGI, etc...) and practices of products and process inspections / certifications will generate needs in this sector and a demand for qualified human resource.
- A capacity to mobilize training services (and cover their costs) for farmers and FO officers on specific standards and Internal Control Systems, as a major contribution to achieve the policy objective of increasing value of the production and farmers' incomes.

Besides, as it was done in Preah Vihear, it is also important (as part of a government program to support high quality certified production) to subsidize the costs of Internal Control System (and possibly of Certification) for the first year(s) of implementation, yet with a clear commitment of economic stakeholders (agro-food company and Farmers/FOs) and roadmap to progressively take over the costs.

4.2.3. OTHER INCENTIVE MEASURES?

More incentive measures could possibly be considered to encourage agro-food companies to engage in development of partnership with smallholder farmers to improve quality and value of products. For instance concessional loans (possibly through the Rural Development Bank) for investments (infrastructure or soft) directly related to such projects.

¹⁶ During the workshop on possible role of CRF and FO Federations to support business connection / contract farming, organized by SCCR project with CRF in May 2016, a quick survey was done among participants. Rice millers expressed that they would welcome a role of CRF in order to ease preliminary contacts (such as "business matching workshop), but not a role of facilitation by CRF of contract farming negotiation (this function received the lower score among the possible functions of CRF related to business linkages with FOs... which is understandable as millers do not wish to disclose the details of the terms of contracts they make with suppliers). – See SCCR Quarterly Executive Report #14, page 23.

4.3. SUPPORT MEASURES RECOMMENDED FOR IMPROVING SMALLHOLDER FARMERS POSITION FOR GENERIC PADDY TRADE

4.3.1. CONTINUE TO SUPPORT THE INVOLVEMENT OF FARMER ORGANIZATION PADDY COMMERCIALIZATION

As mentioned in section 3.2.1., Paddy Selling Groups are at their start-up phase, and continued support is still necessary to consolidate the results in a perspective of consolidation and replication.

Some guidelines based on lessons from SCCRП as well as other interventions on rice sector and more extensively on cereals value chain may be proposed to improve the approach:

- To develop PSG in priority with FOs that show certain degree of professionalism, structural paddy surplus production, and real proactivity in willing to link with markets and respond to characteristics demands;
- To promote an integrated approach of technical and financial services delivery from FOs towards their members, including support to production development as the entry point, linked with paddy marketing actions once collective approach on production have been tested and consolidated; the strategy could be to link the access to production services within the condition that a minimum percentage of the production is marketed through PSG system / FOs;
 - To implement a territorial based approach, that is to say to facilitate numerous PSGs creation in a same geographic area, accessible on the same transport axis, in order :
 - To reduce transaction costs for the buyers dealing with several PSG present in the same zone;
 - To favour harmonization of the farming practices among the various FOs members of PSGs, in order to allow the homogenization of the paddy specificities offered by the PSGs, for instance in terms of technical itinerary (cultivation planning, choice of varieties, use and type of inputs, etc.) or post harvesting (paddy drying, cleaning, packaging, etc.);
- To favour the cost reduction of the technical and financial services delivery to the farmers that could be possibly implemented by the FOs;
- To create the socioeconomics conditions of an alliance between FOs, allowing to control the fulfilment of the previous delivery agreement with buyers (social control), to increase bargaining power through centralization of the paddy offers from the various existing PSGs in each zone;

In the medium term perspectives, according to the volumes that are negotiated and the efficiency of the collective organization among the various PSGs and FOs, the option of a collective storage combined with stock pledge agreement mechanisms system might be explored, knowing that various scenarios are possible (Storage building belonging to the FOs, storage in a building belonging to a third actor with the participation of a broker whose role is to certify the quality of the available paddy and to find interested buyers, etc.).

Box 1: A possible model with credit provided to buyers (millers) with the paddy they buy from FOs as collateral

Building on the use by Farmer Organizations of drying and storage facilities made available for them, a bit more elaborated developments could be considered. A possible model to be explored would be as follows:

Farmer Organizations bring their wet paddy to a drying and storage facility. They dry (properly) their paddy there and store it for a short duration. Each batch of paddy may be inspected and described (possibly certified) with all necessary technical specifications (varietal purity, moisture content, broken rate, foreign matter, etc.), allowing Farmer Organization to get purchase offer from a large number of potential buyers without the need to bring them samples. Since the paddy is already in a proper storage place, a side service could consist in offering to buyers the possibility to keep their paddy in the warehouse and pay up-front only a part of the price as a deposit (for instance 20% or 30% of the value of the paddy) and pay the balance when they will take the paddy out of the warehouse 3 to 9 months later. The Farmer Organization would be paid immediately by a bank (RDB?), the warehouse receipt being used as the collateral for the loan to the buyer. This would help millers to address the issue of access to finance (access to a credit without additional land title or other immovable asset to be pledged), but if the system applies only to the paddy offer for sale by Farmer Organizations, this also generate an advantage from buying from those FOs, and thereof put farmers in a better position to negotiate the price (improved bargaining power). .../...

.../...

A more comprehensive concept note on the concept is available with SCCRP project¹⁷.

Two remarks:

- Federations of Farmer Organization (such as FAEC, FCFD, FWN) could be associated and play a role to set up a platform for the selling of the paddy batches.
- A constraint is the availability of independent drying and storage facilities. Very few services are available (such as *‘Thanakear Srov (Kampuchea) Pl.’*), but ADB’s financed Rice-SDP project intend to develop such infrastructures, which could be an opportunity to implement this model, and RDB has also recently encourage application for loans for such investments.

4.3.2. SPONSORING OF THE PADDY TRADING PLATFORM AND SUPPORTING ITS EVOLUTION TOWARD A MORE AMBITIOUS SYSTEM...

As mentioned in section 3.2.2., the Paddy Trading Platform is at its beginning, and for the time being, limits its actions in publishing information on paddy availability at FOs level as well as creating and updating a directory of FOs and millers (or potential buyers). The embryo initiative still need continued support to be developed and to achieve significant and perennial results. Its operational costs could continue to be subsidized by public funds or by a project in order to leave enough time for its consolidation.

Besides, in this perspective, development of PTP should explore several paths that could be developed progressively:

- Short term: PTP remains a tool to convey announcements of FO’s foreseen harvests and establish a link with millers potentially interested. But it is still not a tool for on-line transaction, but just for sellers and buyers to get in contact:
 - Paddy volume should be big enough to allow commercial transaction cost reduction and economic scale for both players;
 - Estimation of paddy production and delivery, deadline and modalities for deliveries have to be respected by producers;
 - But on the other hand, potential buyers shall react quickly to announcement posted, at least few days before the beginning of the period of availability of the paddy, so the FO can get prepared to actually collect the paddy from its members (in most of the case, the FO will get engaged in collection only if they have identified a buyer, otherwise, they will let their members sell by themselves to middlemen);
 - More efforts have to be made to communicate directly with millers to raise their awareness about this proposed service and encourage them to use it; Possibly, communication based on a strong PTP promotion towards their potential users could be implemented ;
 - Costs should (at least partly) be supported by public funds / project in order to leave time for consolidation and scaling up. Costs include not only the web hosting and costs of SMS announcement sent to millers, but also (and it is the main part) individualized support to FOs in order to help them to gather reliable data from their members and prepare their announcement (task currently undertaken by FO Federations)¹⁸;
 - A continuous capacity building program targeting FOs to help farmers groups to use efficiently the various services offered by the PTP should be supported as well.
- Upgrading Paddy Trading Platform: from pre-harvest announcement of foreseen paddy production, to detailed post-harvest description of actual batch of paddy available in stock
 - Drying and storage facilities shall be made available / accessible for Farmer Organizations to use, at affordable conditions;
 - Available paddy at FOs levels should be standardized according to a common nomenclature recognized by both FOs and buyers;

¹⁷ J.-M. Brun, “Proposed pilot action on improved paddy quality recognition and storage + bidding / auction system – Concept note for discussion”, Support to the Commercialization of Cambodian Rice Project, 26 February 2015.

¹⁸ More details (notably about costs and on required support to PTP) can be found in SCCRP Case Study #5 on the Paddy Trading Platform.

- Quality of paddy should be defined and guaranteed by an independent and recognized third party inspector;
- Paddy volume should be big enough to allow commercial transaction cost reduction and economic scale for both players;
- FOs might need specific credit facilities so they can purchase the paddy from their members in advance.
- One step further: provide services for secured on-line transactions: if batches of paddy of consistent quality are well stored in easily accessible location, and each batch reliably described in term of grain specifications, then it paves the way for on-line transaction, based on price proposed by FOs or on a system of auction. It could be combined with facilities of payment proposed to the buyers (as developed in Box 1, previous page).
- The possible development (with the government support) of a network of paddy drying and storage facilities could be done in synergy with the consolidation of the Paddy Trading Platform, and could be highly beneficial to smallholder farmers, if appropriated credit facilities are associated with it.

Beside, a system of weekly based information on paddy and milled rice prices in the major market places in Cambodia, as well as in the neighboring countries, could be stimulated and organized by the platform of the FOs Federations, and the information being disseminated by the PTP through affiliated FOs through adequate ICT tools.

Such developments would require significant subsidies to be launched and tested, before reaching cruising speed. However, it will be important to organize from the beginning the access to some of the services on a payment base (as for example, a commission system) in order to prepare their autonomy in the medium term. But efficiency and reliability shall be proven first, as at early stage, users may not be willing to pay before the system have gained their trust.

It is also essential to strongly involve national Federations of Farmer Organizations in these processes and systems development (PTP, market information system), as a guarantee that the objectives (strengthening farmers bargaining power and increasing their capacities to negotiate a fair remuneration) are kept in mind.

4.5. REDUCE OTHER COSTS DOWNSTREAM OF THE VALUE CHAIN TO INCREASE THE CAPACITY OF MILLERS TO PAY PADDY AT HIGHER PRICE?

It is well documented that milling and logistic costs are higher in Cambodia than in the neighboring competitor countries, as already recalled in 2.1. These higher costs partly explain that farm gate prices for paddy are relatively lower in Cambodia than in Vietnam, and in Thailand.

The Royal Government of Cambodia could possibly take measures to help to reduce millers and exporters costs (energy and transportation / logistic costs, interest rate on credit, etc... and in the longer term transport infrastructure development). But this provides no guarantee that millers would transfer forward (part of) the economy they make on their operation costs on the price they pay the paddy (especially if not all millers benefit from such measures, and thereof the ones who benefit would stay in competition with millers which may not have such an advantage).

So for such measures to have an impact on smallholder farmer incomes, it is highly recommended that they are discussed and elaborated in the frame of a truly inter-professional framework, in dialog with the public authorities. Besides, the support to Farmer Organizations to improve their access to information and their capacity of negotiation still remain essential.

Besides, at the production level, improved regulation on pesticides and more importantly more efficient advises to farmer on their use could at the same time reduce costs, improve productivity, and address potential risks of ban on some export markets.

ANNEX 1: INTERESTS AND LIMITS OF CONTRACT FARMING

(Source: J.-M. Brun, *“Proposed pilot action on improved paddy quality recognition and storage + bidding / auction system – Concept note for discussion”*, Support to the Commercialization of Cambodian Rice Project, 26 February 2015).

1. LIMITS OF CONTRACT FARMING FOR “GENERIC” PADDY

From experiences conducted in 2014, it seems that, in the context of Cambodian rice value chain (characterized by a very high number and density of paddy producers and buyers in a very competitive environment), contract farming hardly bring significant benefits to both parties (buyers and seller), unless at least one of the three conditions are fulfilled:

- Paddy produced is not generic or conventional, but has a specificity that only few producers can guarantee and only few buyers will value. This is typically the case of organic paddy¹⁹.
- The contract allows a very significant improvement in quality of the paddy produced that farmers would not be able to achieve without the support provided by the contract (thanks to supply of seeds notably, and/or to technical advices or other inputs supplied...). Farmers can then get a better price than before that is justified by the improved quality... But the Contract Farming as a long term partnership is still very fragile because other buyers may also value the higher quality and may also offer a good price: the risk of side selling remains. Especially if the input initially provided by the contractor for farmers to achieve the “qualitative jump” might not be needed for ever. Access to seeds of a new inbred variety are needed for farmers to get the initial seeds, but they may then use saved seeds and might not need the contract with the buyer in the long term, especially if other buyers are likely to value the same paddy as the contractor does²⁰.
- Other side services embedded in the contract bring sufficient benefit to justify a sustained relation between the buyer and the producers.

If the contract farming does not significantly contribute to improve the quality of paddy produced (i.e. the paddy produced by contracted farmers is similar to what the buyer could get from any other producer or middleman) and if the price is similar to market price²¹, then there’s no point in making contract. There are no significant advantages for contract farming if it is to produce and buy “paddy as usual” (unless the fact to sign a contract open access to side advantages / services, like credit access – concessional loans – for instance). Especially as transaction costs in the case of contract farming are possibly higher for farmers and for millers than just dealing with a middleman for a single on-the-spot transaction.

¹⁹ In the pilot action implemented in Preah Vihear, cooperative involved can produce organic paddy that can be certified as such because they have the internal control system in place. The buyer (AMRU) has a market for organic paddy, but cannot supply this market unless he sources his paddy from these very few cooperatives that have this system in place. It is thereof essential for AMRU to secure his source of supply. On the other hand, local middlemen have no specific market for organic paddy and will not pay a premium for the paddy produced by cooperative. It is thereof of paramount importance for the cooperatives (which invest money in the ICS system) to make sure that their paddy will be bought by a buyer offering a premium for organic. The drivers to sign a contract are very strong for both sides.

²⁰ Typically a lesson learnt from AKR experience. The case was successful as it helped farmers to access and adopt fragrant rice varieties for which the contractor was offering a much higher price than for previous varieties grown by farmers. But other potential buyers were also able to offer a high price for the new variety introduced, progressively increasing the risk of side selling as buyers get to know that the fragrant variety was now available in the area of the contract farming. Contracts for *Pbka Kravanb* and *Pbka Champa* proposed by Golden Rice are relatively successful and useful but could be exposed to similar difficulties in the future, especially if the varieties are inbred varieties.

²¹ As it has been the case in the contract signed with Loran or BRICo in 2014, with other millers used as reference.

2. NO POINT IN BINDING WITH ONE EXCLUSIVE BUYER FOR SAME PADDY, SAME PRODUCTION COSTS AND SAME PRICE

Does Contract Farming improve the bargaining power of farmers / Farmers Organization (one of the MAFF policy objective)? For sure it changes the timing of the negotiation. It also changes the scope of what is negotiated between the two parties: it's not only about price, but also (possibly) about services.

Yet, speaking about price: is the price setting in the contract favorable for farmers?

- If the price in the contract is set as a fixed price, then it is a “bet” for both parties who agree on a price that they consider as fair at the time of negotiation. One may lose or win depending on the evolution of market prices...
- If the price is based on market price at the time of harvest + a premium, then it is likely to be favorable conditions for farmers (except if references for “market price” are biased).
- If the price set in the contract is just “market price”, nothing more, then the benefit for the farmers may come from the ability to increase volumes or quality of the paddy they produced, or to reduce production costs, thanks to the services provided by the buyers as part of the contract. If this is the case, then even on a market-price basis, the contract might still bring benefit for farmers (“same price but higher profits”)...
- ...But if the price in the contract is “market price” and the services included in the contract does not allow farmers to either produce more, or produce higher quality or reduce their costs of production... then contract farming does not really bring a benefit for farmers, while constraining their bargaining power at the time of harvest since they are bound to sell to the contractor.

So whenever the contract is defined in order to produce “the same paddy, produced in the same way” than what farmers are usually doing, binding them to sell to one exclusive buyer at market price, then contract farming is definitely not the best option.

