

Rice harvest (Christian Bobst)

## Community Safety Nets - Establishment of rice seed banks at village level ( )

A rice (seed) bank is a community safety net system where farmers can get both rice seeds for cultivation and rice for consumption from a communal storage house in order to increase their food security by guaranteeing: (1) year-round access to high quality seeds and rice for consumption, (2) access to seed and rice for consumption after an extreme weather event (drought, flood) and (3) improved quality of the planted seeds through the provision of new varieties better adapted to local conditions (e.g. fast maturing, floating rice)

A rice (seed) bank is a system where farmers can get both high quality rice seeds for planting and rice for consumption from a communal storage house. Requirement for the use of the rice (seed) bank is that farmers pay back the purchased rice seeds or rice for food with a 20% interest rate after their next harvest. The bank is managed by a community council consisting of members of the village in collaboration with the local NGO Society for Community Development in Cambodia - SOFDEC.

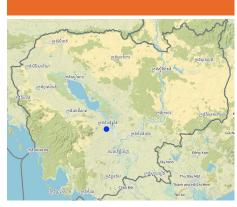
The rice (seed) banks act as a community safety net in the villages to guarantee food security despite the threat of extreme weather events such as drought or flood. Because of the constant access to high quality seeds, farmers can sow a second time in case the first sowing was lost due to a drought or flood. Also, the communal storage of rice for consumption helps particularly poor farmer families with small plots in case they do not get enough yield on their field to feed the household.

Moreover, new rice varieties, which are better adapted to local conditions and which also perform in the case of extreme weather (fast maturing, floating rice) are introduced through the rice (seed) bank. Besides these new varieties (the result of research carried out by the Local Agricultural Research and Extension Center LAREC in collaboration with other research institutes) have higher yields and can also be sold at a better price on the market. The need for a rice (seed) bank is decided in participatory manner by the village community. In case a bank is established it is managed by a community council of elected community.

In case a bank is established it is managed by a community council of elected community members. The council is responsible for the storage, the distribution and supervises the back payment of the rice (seed). Through the collaboration between the Community Council and SOFDEC, new SLM Technologies such as the System of Rice Intensification can be promoted in the target villages.

The stages of implementation are as follows:

- 1. SOFDEC consults with the villagers about the aim and the need for a rice (seed) bank. Generally, rice banks are established if farmers express that there is a high exposure to extreme weather event, low food security and/or rice seeds are of bad quality (bad germination, low yields).
- 2. The decision about the establishment and implementation of a rice (seed) bank is made by the village community.
- 3. A Community Council is elected by the villagers and trained on their role and functioning of



: Different districts, Kampong Chhnang,

• 104.63912, 12.09299 : 2000 : the rice (seed) bank by SOFDEC staff.

- 4. The communal storage is built. Building materials are provided by SOFDEC, the community contributes with labor.
- 5. SOFDEC provides a first stock of high quality rice seeds from LAREC and rice for
- 6. After the first harvest, the farmers pay back the seeds and rice consumed with a 20% interest rate.
- 7. SOFDEC monitors the functioning of the rice seed banks and takes a mediating role in case that problems between the community council and the village community arises.



Rice bank to the right side of the village meeting hall (Stefan Graf)



Rice harvest (Christian Bobst)

The main aim of the approach is to increase the resilience of farmer families by improving their food security (rice seeds and rice for food are now available the whole year round, mutual support after droughts or floods possible), increasing their income (rice varieties higher yielding) as well as strengthening local institutions (community committees manage the rice banks, and participate in decision making on a local level).

- / / : Willingness of the community to support each other through a safety-net system
- : First inputs for the establishment of the rice (seed) banks are provided by the project (materials for the building of the bank, improved and locally adapted rice seed from LAREC)
- / : Rice (seed) banks are decided upon and managed by the community itself through an elected community council
- SLM : Through research done by the Local Agricultural Research and Extension Center LAREC, the rice varieties in the rice banks are adapted to the needs of the farmers (e.g. higher yielding, short breeding, drought resistant). Through the SOFDEC programme farmers are furthermore capacitated in new cultivation techniques (such as System of Rice Intensification SRI).
- / / : Some farmers are reluctant to be part of the rice (seed) bank, as they do not want to use/consume someone else's rice, which might be of different quality than his/her own
- : Some farmers struggle to repay the amount of rice borrowed including the requested interest rate of 20%, particularly after an extreme weather event (drought, flood)
- SLM : Lack of technical knowlegde on high quality seed multiplication leads to rice seed supply of bad quality in the rice bank.

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/	Farmers	Farmers can borrow rice seed and in case of a disaster also rice for consumption from the rice bank. After their next harvest the farmers have to pay back the rice (seed) borrowed with a 20% interest
		Community Councils are elected by the community and are managing the rice banks and make sure

	that the regulation are met by the farmers participating in the rice banks
Society for Community Development in Cambodia - SOFDEC	SOFDEC is responsible for the planning and design of the approach, implementation of rice banks as well as for the financing of the initial establishment of the rice banks.
village chief	The village chief facilitates the introduction of the rice seed bank in the community and supports the community council in the steering of the banks as well as when facing problems within the village concerning the bank. Furthermore, the village chief has to verify and acknowledge land acquisation documents land for rice bank construction and bylaws.

{} SOFDEC



Land users are consulted regarding their needs for the establishment of a rice bank.

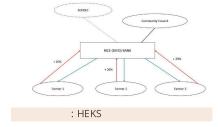
The planning and design of the rice banks is carried out by SOFDEC staff. Implementation of the banks is done by SOFDEC in consultation with the land users. SOFDEC finances the materials for the establishment of the rice banks, whereas the community contributes with their labor. Community agrees on the regulations (by-laws) for the implementation of the rice banks.

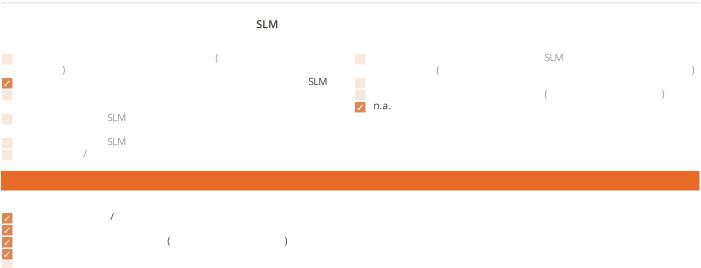
SOFDEC initially monitors the functioning of the rice banks (3-4 years after establishment). The community council is responsible for the everyday monitoring of the banks (e.g. participating farmers adhere to the regulations agreed on by the community).

Research for improved locally adapted rice varieties (fast maturing, floating rice) is done by Local Agricultural Research and Extension Center-LAREC in collaboration with other research institutions. The improved seed developed by LAREC is stocked in the rice seed banks.

Rice (seed) banks are established on a village level after consultation with the local farming community. The banks are managed by an elected community council. Farmers take out rice seed or rice for consumption (in case of an emergency) and pay back the amount of rice (seed) with an interest rate of 20%.

SOFDEC facilitates the establishment of the rice seed banks and provides the material for the building of the rice seed bank as well as the first supply of rice seed.





Community councils were trained on functioning and administration of the rice bank. Farmers were trained on the multiplication and collection of rice seeds.

Knowledge exchange between the land users and SOFDEC staff.
Knowledge exchange between SOFDEC and the Provincial Department of Agriculture.

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Community Councils

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Community Councils

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Everyday monitoring is ensured by the community council. For the first 3-4 years after the establishment, SOFDEC monitors the implementation and functioning of the rice banks. Monitoring aspects: -No. of members, kg of rice taken out of the bank and payed back to the bank - General attitude towards the rice bank (are the pay back mechanisms adhered to, etc.) - Amount of yields and quality of rice (seeds), sometimes optimized



The project provides the materials for for rice bank construction.

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Rice seeds for the first season after the implementation of the rice bank is provided by the project.
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All construction materials for the rice bank building is provided by the project. Type of construction (wood or stone) varied depending on the preferences of the village community.
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SLM?

Farmers have access to seed varieties which are adapted to local conditions (e.g. drought and flood resistance), ensuring that yields are also generated in case of an extreme weather event.

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Rice (seed) banks are open to everybody. Thus, economically disadvantaged land users and ethnic minorities participate in rice banks. The rice banks function as safety nets in cases of extreme weather (e.g. droughts, floods) or economic despair.

The rice banks offer year round access to high quality rice seed and rice for consumption all year round and also during extreme weather events. This allows farmers to sow out again in case one harvest gets lost. The rice bank also benefits farmers with small land plots – they might sell all their yields of new varieties on the market and buy with the return conventional rice for consumption, which is cheaper.

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Increased resilience to extreme weather events because of the availability of both seeds and rice for consumption. Moreover, the seed varieties stored in the rice bank is adapted to local conditions (e.g. fast maturing, floating rice), ensuring that yields are also generated in case of an extreme weather event.

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The new varieties promoted through the rice banks have higher yields, thus leading to more income for the farmers. Farmers also get higher prices on the market for the new rice varieties.

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Initial coaching by SOFDEC is needed, however, after 3 years the rice banks function without any external support.

well-being and livelihoods improvement

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The rice banks offer access to high quality seeds to all farmers in the community.

SLM

- Increased food security and resilience due to the permanent availability of rice seeds or rice for consumption.
- More income due to higher yields and better prices for new varieties.
- After about 3-4 years, the banks mostly work independently.

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- Limited amount of rice (seed) to be borrowed. Increase the storage capacity and conditions.
- Required technical and managerial knowledge for the community councils is high. Regular training sessions by SOFDEC
- Rodents or insects might destroy the rice. Apply narrow-mash nets to protect the rice from rodents and other animals
- Some farmers do not comply with the required interest rates, delays in payback, etc. Make a contract with them, decide on a step by step pay back manner, or if the farmer is not able repay (sick family member, loss of land, etc.) the whole group can decide to waive the debts

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- Seeds are treated with pesticides to make them last. Improve the storage conditions or use different techniques to prevent pests (Integrated Pest Management IPM)
- Only rice is considered. Introduce a similar approach also for other plants in order to diversify the farmers' income. Allow the farmer to pay back with other crops or varieties.
- None

Stefan Graf

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https://qcat.wocat.net/km/wocat/approaches/view/approaches\_1848/

SLM

- Book project: where people and their land are safer A Compendium of Good Practices in Disaster Risk Reduction (DRR) (where people and their land are safer)
- The Society for Community Development in Cambodia (SOFDEC) is a Cambodian Non-Governmental Organization, established in 2006 through the localization of HEKS (the Swiss Church Aid) project in Kampong Chhnang province, Cambodia. The vision of SOFDEC is that Cambodian people living in Cambodia live a state of comfort, equality, equity, and have ownership over the sustainable development of their community. The mission of SOFDEC works in partnership with community based organizations and relevant institutions through integrated community development, research, human resource development, enhancement of family economies, in the hopes to uplift the living standards of the people in the target areas. Our goal aims to uplift the living standards of the rural people of Cambodia through the improvement in income generation, sustainable agricultural practices, microfinance, health, human resource development, and sustainable natural resource management.: www.sofdec.com

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