

GRET



A diversified agroecological farm with repulsive plants to protect the garden from insect pests

Developing sustainable agriculture by and for farmers in Siem Reap province in Cambodia

Cambodian agriculture plays a major role in supporting **economic growth, food security** and **rural economic development**. The sector employs 50% of the country's labour force (CIAS, 2019) and accounts for approximately 21% of GDP (World Bank, 2019). Agriculture is therefore the **first pillar** of the Royal Government of Cambodia's rectangular development strategy. Yet, in Siem Reap province, small farmers are struggling to adapt their production to demand – which is rapidly growing – and to recent consumer trends boosting demand for healthy, natural products.

In the past eleven years, the population of Siem Reap increased by 12%, but local production has not adapted to this increase in demand at provincial level (National Institute of Statistics, 2019). This situation has led to the development of efficient supply chains based on products imported from other provinces and neighbouring countries such as Vietnam and Thailand, creating **competition for local products** and **strongly influencing fluctuations in vegetable prices**.

Given this situation, GRET, its local partner CIRP and the provincial Departments of Agriculture and Commerce, have been working since 2010 in two districts in the province to strengthen family farming through agroecology.

The actions comprise six components:

1. Promotion of improved rice production techniques.
2. Intensification, diversification and improvement of the quality of vegetable production.
3. Improvement of chicken production.
4. Improvement of product marketing.
5. Creation and strengthening of credit and savings groups.
6. Access to water via the construction of family ponds and support for acquisition of irrigation equipment.

The actions were funded by the Hauts-de-Seine Departmental Council (CG 92), the European Union, ICCO, CFI, DCA and the Louis Dreyfus Foundation.

KEY FIGURES

- 2,300 beneficiary producers, 75 % of whom are women, living in 54 villages.
- 35 vegetable and chicken producers' groups supported.
- 3 cooperatives created, bringing together 263 members.
- 1 producers' market set up.
- 420 family ponds constructed.
- 36 credit and savings groups created.
- 72 video tutorials produced by farmers.

Loosely structured local agricultural value chains

Since 2010, the Apici project conducted by GRET and its partners has been opening up the way for **more productive, responsible, varied agroecological agriculture** in the Siem Reap region. At the start of the project, a study of local agricultural value chains highlighted certain limits and several challenges to be met.

For example, single-crop farming was predominant at the time in the Siem Reap region, in both the rice and vegetable value chains, generating massive, poorly managed use of chemical pesticides and fertilisers. Farmers' yields and incomes were low, and the majority of producer families were not self-sufficient in terms of food.

In addition, lack of infrastructures for irrigation and of access to funding was a factor limiting farms' productive development.

Lastly, farmers' lack of organisation, in groups or cooperatives, prevented farmers from influencing the sale price of their production.

The Apici project

The Apici project teams structured this sector and enabled the **creation of three cooperatives** playing a major role in collective marketing of local products. These cooperatives developed a **participatory guarantee system (PGS)**, certifying the quality of local products. The project also accelerated the development of an irrigation system with the construction of **420 family ponds** and the dissemination of **innovative systems such as micro-irrigation**.

In addition, **36 credit and savings groups** were set up, providing their services to more than **2,000 beneficiaries**, with a total capital of over **one million dollars** in 2021.

Lastly, a **producers' market** was set up in Siem Reap to enable direct sale of certified produce that is now recognised throughout the region.

In parallel, an original component **transferring knowledge** on agroecology was implemented via the use of videos produced by farmers using their smartphones. At the end of the training organised by GRET and its partners, **72 videos** had been produced by the farmers and shared on social media and via the AliSea network. Certain videos were **viewed up to 1.9 million times**, serving as a key media for the development and dissemination of agroecology in South-East Asia.

2 questions to Touch Sokharith, Project manager



What is the project strategy?

The project strategy combines participatory and action-research approaches in order to meet small producers' needs and develop a resilient agricultural model. To do this, the project is supporting the pilot farmers who test and share successful innovations with their peers.

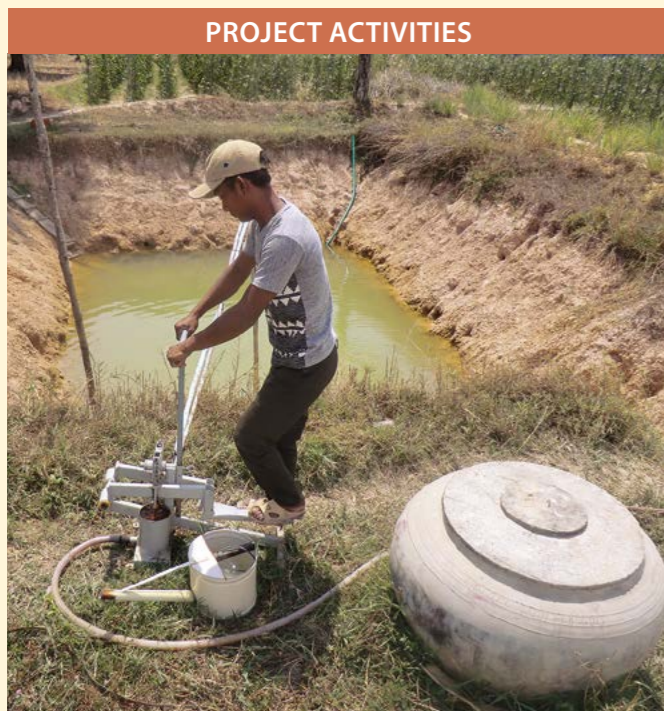
The project is also working on the structuring of local value chains, with the creation of producers' groups (19 groups for vegetables and 16 for chicken) to resolve market access problems and improve their power of negotiation with collectors of their produce. Some of these producers' groups are now working together in three cooperatives. In addition, 36 credit and savings groups were created to facilitate small farmers' access to funding. Today, they have a total capital of over one million dollars, which demonstrates the suc-

cess of this type of approach. To ensure the sustainability of these organisations, the project is strengthening their relationships with local authorities and farmers' federations, and supporting actions to defend their interests and enable their voices to be heard.

Lastly, the project is raising local journalists' awareness on agriculture and supporting producers to make their own videos using smartphones, in order to share their experiences and disseminate agroecological practices on a wider scale.

How do you get local authorities involved?

Local authorities are already involved in the project and participating at various levels. For example, the municipal authorities are participating in the steering committee, supporting and advising the credit and savings groups' management committees. The Provincial Department of Agriculture is supporting the process for legalisation of the cooperatives and one of the employees is involved in the project team as an adviser. Lastly, the Ministry of Commerce organises an agricultural fair every year in the city of Siem Reap and is developing the local market in collaboration with the project.



FAMILY POND AND HAND PUMP USED FOR VEGETABLE PRODUCTION IN THE DRY SEASON



SALE OF LOCAL PRODUCTS AT DOM DAEK MARKET



ECOFARM COOPERATIVE STAND AT THE WEEKLY LOCAL, HEALTHY PRODUCTS MARKET IN THE CITY OF SIEM REAP



FARMERS MAKING A VIDEO USING A SMARTPHONE, TO SHARE THEIR KNOWLEDGE ON AGROECOLOGY

User portraits



Yeng Song

Kok Russey Cheung village, Danrun commune

Mr. Yeng Song cultivates a farm growing 1,000 m² of vegetables and 2,000 m² of rice. There are four people in his family, two of whom are active on the farm.

Thanks to the Apici project, M. Yeng Song became a member of the vegetable producers' group, a credit and savings group and finally he became a member of the Ecofarm cooperative, which was created as part of the project. He received support to construct a family pond and acquire micro-irrigation equipment, which enabled him to grow vegetables all year round, while increasing the cultivated area by 900 m². His income increased from approximately 100 \$/month to 400 \$/month. His vegetables are certified "healthy" by the Ecofarm cooperative's participatory guarantee system.

He had been growing five to six vegetable varieties and has now diversified his production to 15 different vegetables.

He switched from conventional farming to agroecology, based on the use of compost and biopesticides.

Pan Chenda

Chrey Khang Cheryng Village, Kiensongke Commune



Mrs. Pan Chenda is the head of her family and has a son who is a student. The family is classified as "poor" (IDPoor classification).

She cultivates a farm with 375 m² of vegetables and 3,300 m² of rice. She has a family pond acquired with the support of the project, as well as micro-irrigation equipment. This enabled her to increase the surface of tables to grow vegetables, and made it possible for her to grow all year round instead of only during four to six months previously. She is also a member of a vegetable producers' group and of the Ecofarm cooperative.

Before the project started, she had been growing one to two vegetables. Today she has diversified her production to six vegetable varieties and three fruit trees.

Her income increased from 60 \$/season to 140 \$/month thanks to vegetable and chicken production, which also improved.

This family was able to get out of poverty and earn a stable income throughout the year thanks to the technical support and mutual help provided by the Ecofarm cooperative.

A QUESTION TO...

Mr. Koun Vun

Siem Reap Provincial Department of Agriculture



What has the Apici project changed for small farmers?

In keeping with the Ministry of Agriculture's strategy to work with agricultural cooperatives to meet market demand, Apici is supporting three cooperatives and 35 farmers' groups to improve the quality of their products (rice, vegetables and chickens), strengthen their members' capacities (techniques, finance, management, etc.) and improve their access to the market via local collectors of produce.

Again in line with the Ministry's recommendations, the project's support for the creation of credit and savings groups also enabled farmers to have access to low-interest loans to develop their economic activities.

Mr. Kimly

Provincial Department of Commerce



What are the main challenges for small farmers in terms of market access?

Local agricultural products encounter strong competition from imported products, which often cost less to buy.

In addition, fluctuations in prices generate a socio-economic risk for small farms. To support small farmers, Apici and the Provincial Department of Commerce (PDoC) are creating spaces for collaboration between the various stakeholders in the value chain and exchange of market information between producers and consumers. The creation of a trusting relationship between consumers and producers is also an important factor in overcoming market access difficulties.

In concrete terms, the Department of Commerce, together with the Apici project, opened a farmers' market in the city of Siem Reap, which serves as a link between rural producers and urban consumers. In addition to this, an annual fair is organised to make local products known and promote them. All these initiatives are aimed at improving the connection between local agricultural production and urban consumer markets.

A message from the donor

Georges Siffredi

Chairperson of the Hauts-de-Seine Departmental Council (CG92)



"Agriculture plays a major role in the economic growth, sovereignty and food security of a country. The Hauts-de-Seine Department has made local agricultural development a priority by including it in its international cooperation policy. Since doing so, the Department has been supporting the Apici programme, implemented by GRET as part of decentralised cooperation with Siem Reap Province.

With participation from the provincial authorities, it is rolling out agroecology via the diversification and valorisation of local produce and the implementation of short supply channels. This approach, adapted to the Siem Reap territory and respectful of its economic, social and environmental ecosystem, is all the more pertinent in that it recently enabled beneficiaries to cope better than others with the crisis generated by the worldwide Covid-19 pandemic.

Thanks to this partnership, the agroecological transition launched in Siem Reap makes this Cambodian territory a leading province in this regard."



Annual agricultural fair organised in partnership with the Siem Reap Provincial Department of Commerce in August 2020



Micro-irrigation and mulching on an agroecological farm, to protect the water resource

2 QUESTIONS TO A LOCAL PARTNER

Prak Sereyvath

Executive Director of CIRD



What are the challenges faced by the project to date?

As in many countries, agriculture in Cambodia is not an attractive sector because it involves hard, risky work that is not very profitable.

As a result, the majority of younger generations do not take over their parents' farms, farmers are getting older and older, and their productivity is lower. We have been observing a significant decrease in the farming population since the Apici project began in the region 10 years ago.

What are the next stages being envisaged?

To meet the above challenges, the project intends to develop a new intervention strategy enabling farmers, in particular younger farmers, to obtain economic incentives for their farms. Prospects are also evolving towards empowerment of farmers and the various management committees, and transfer to farmers of certain functions held by the project, in particular technical training.

As consumers are increasingly aware of the importance of safe, quality food, the project is also aiming to raise the awareness of stakeholders in the sector on food security and encourage linking agricultural activities with basic knowledge in terms of nutrition.

Agroecology at the core of the project's strategy

Agroecological transition has contributed to radical changes in agricultural systems, enabling farmers to diversify products, reduce the use of chemical fertilisers by using compost, reduce use of pesticides, protect natural resources (soil, water, biodiversity), revalorise local knowledge, develop new technical references and a new market to meet growing consumer demand for healthy products.

The **irrigation component** is the key to ensuring year-round production, especially out of season when demand and prices are high.

As producers need **water-efficient technologies**, a "climate-smart technological package", including micro-irrigation, family ponds and trees to control evaporation, are all techniques to be disseminated.

Becoming organised in cooperatives for greater autonomy

Farmers became organised in vegetable and chicken producers' groups, which enabled them to have **greater power of**

negotiation. By forming groups, producers and collectors of produce become stronger when negotiating the price for their production with purchasers, thereby improving their income and their situation. The challenge consists of ensuring **autonomous operation** of producers' organisations, in particular their capacity to **ensure training on agroecological techniques for farmers**, thanks to a network of pilot farmers.

Favouring the dissemination of messages on agroecology and encouraging young people to consider working in agriculture

The communication strategy plays a central role in the programme, ensuring visibility of the action among potential partners, on promotional aspects and marketing of goods and services, facilitating sharing of know-how, training and presentation of the project methodology and tools.

An innovative way of promoting agroecology was initiated: the **production of video tutorials** using smartphones. These videos are made by farmers and disseminated on social media, (some videos have generated 1 million views).

GRET and its partners **raised awareness among local journalists** on the impacts of pesticide use on agriculture and



Harvesting vegetables grown practising agroecology



Monthly meeting of a savings group

the environment. Disseminating this type of content in the media makes it possible to **give young people in rural areas prospects** in their community, in particular by highlighting emerging agroecological initiatives that are promising in terms of income, health and autonomy.

Credit and savings groups, efficient organisation

Various forms of legal registration were proposed to the groups, who chose the form best suited to them based on their situation and their objectives. Registration with the Ministry of Rural Development and transformation of a group into a cooperative were among these forms of legal registration.

Today, these groups are generating sufficient profit to invest in shared professional services (accounting services to facilitate financial management and decision-making). These solutions proved effective to manage credit and savings in villages. Farmers were able to save and obtain loans to finance small-scale individual activities.

Chicken breeding supported by the project to improve the local chicken value chain

Promoting a policy in favour of agroecology

Participatory guarantee systems were implemented to enable small producers to obtain recognition of the quality of products they provide using agroecological techniques, without having to call upon a third party – which is often costly – to obtain certification. GRET and its partners therefore encourage the Cambodian State to recognise these systems and promote agroecology more widely.





Collection and weighing of vegetables produced using agroecological techniques, for sale at the Siem Reap local produce market

References

Other sources of information on the Apici project

- Strengthening agroecology stakeholders in Cambodia: <https://www.gret.org/projet/renforcer-les-acteurs-de-lagroecologie-au-cambodge/> [in French]
- Rural networks in Cambodia: <https://www.gret.org/2018/10/rural-networks/?lang=en>
- Webdocumentary entitled "Agroecology practices introduction in Siem Reap Province": <https://www.youtube.com/watch?v=aDeqbtxFJto>
- Editions du GRET, "Agroecology and agroforestry practices in tropical wet zones": <https://www.gret.org/publication/agroecological-and-agroforestry-practices-in-tropical-wet-zones/?lang=en>

Project on family farming in Asia: GRET's experience in Myanmar

- GRET also works to support family farming in Myanmar, as part of several projects, in particular the project entitled "Rural intensification for sustainable economic development": <https://www.gret.org/projet/ayeyawaddy-delta-program/>

GRET and support for family farming

Since it was founded 40 years ago, GRET has been supporting family farming in all its countries of operation. This support concerns both innovation techniques enabling increased income and farming families' quality of life, and the organisation of value chains so that added value remains in the territory.

In so far as possible, GRET promotes the use of agroecological techniques because family farming can integrate these practices with maximum effectiveness. This requires secure access to land, stronger support for investment in agroecology, wider dissemination of specific knowledge and know-how, greater valorisation of agroecological products, and promotion of cultivated biodiversity.

GRET works on advocacy, in particular through its activity within the Coordination Sud Food and Agriculture Commission, with a view to the implementation of policies in favour of family farming.

Find out more about the Apici project:

<http://www.GRET.org/site-project/appui-a-une-agriculture-intensive-peu-consommatrice-dintrants/> [in French]

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