

Putting the Pieces Together

The Advantages of Integrated Rural Development Programming

A case study with a special focus on the ‘Promoting Resilience in Agricultural Production and Enterprises for Food Security among Subsistence Farmers along the Mekong’ Project (implemented by CRDT)

May 2019



National Council for Sustainable Development
General Secretariat
Department of Climate Change



Ministry of Environment

The Benefits of Holistic Integrated Rural Programming

There is a growing recognition of the fact that complex problems need complex solutions. A poor village needs help with many aspects of life and all of these are interrelated. Providing clean drinking water to a village does not only improve people's health. It also increases children's performance and attendance at school. Education for mothers improves the health of their children. And an irrigation system can do more than just provide water for agriculture; it can also reduce the risk of landslides and floods. That is why the Cambodia Rural Development Team and others had adopted holistic, integrated programming to lift up rural communities. Success in one area can strengthen successes in other fields as well.

This approach is reviving lessons from the area-based development (ABD) approaches pursued in the 1980s and 1990s in many rural parts of the world. ABD is defined as an approach that targets specific geographical areas, characterised by a particular complex development problem, through an integrated, inclusive, participatory and flexible approach.

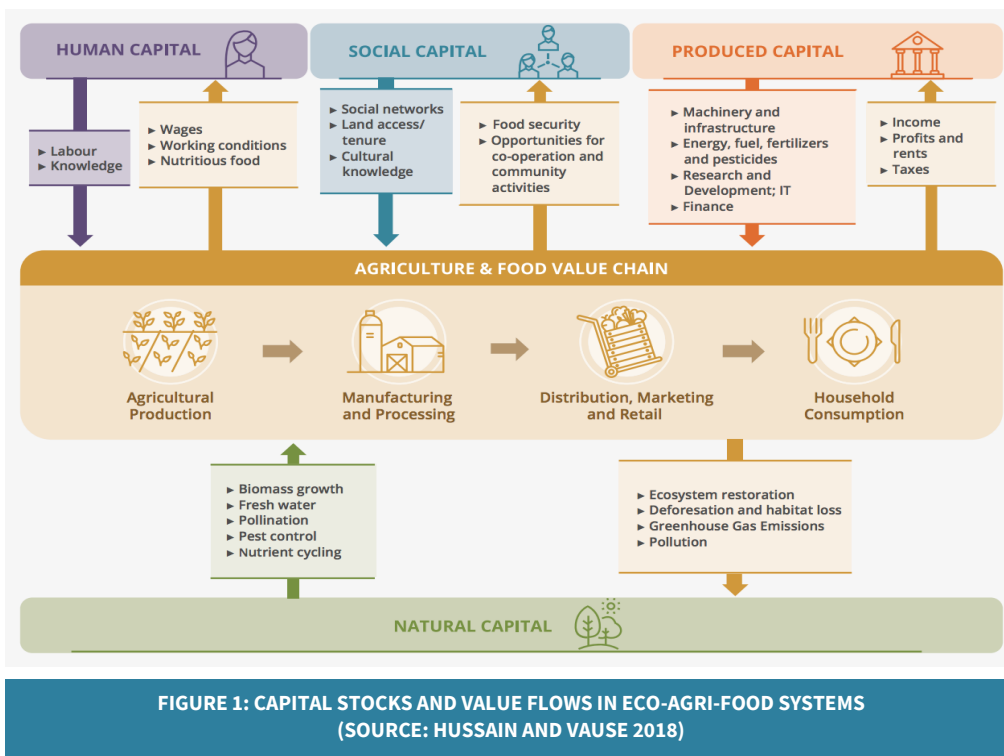
ABD's territorial focus is derived from the understanding that the space or area in which people live should be the central point for improvement. A differentiating factor of the ABD approach is that the tools which are considered relevant to tackling the unique problem or problems at hand are applied simultaneously and in an integrated manner. The tools may not be novel in themselves but the fact that they are implemented in an inter-related, inter-dependent manner is decisive in the ABD approach.

Another rather recent approach developed by the Economics of Ecosystems and Biodiversity for Agriculture and Food (TEEBAgriFood) Initiative adds to two key aspects to the above-mentioned approaches: (1) the system thinking throughout the analysis, planning and implementation phase (TEEB uses the term "eco-agri-food systems"); (2) and a

Little attention is typically paid to connecting the pieces of the systems jigsaw to achieve a comprehensive understanding of reality, but this is necessary. Without this perspective, human, social and environmental impacts along value-chains are not sufficiently considered, especially as they are usually economically invisible.

- TEEBAgriFood Synthesis Report 2018

more pronounced environmental angle. TEEB views rural agricultural realities as diverse agricultural production systems to grow crops and livestock and employ more people than any other economic sector. They are underpinned by complex biological and climatic feedback loops at local, regional and global level. Overlaying these natural systems are social and economic systems which transform agricultural production to food and deliver it to people based on market infrastructure and forces, government policies, and corporate strategies interacting with consumer and societal preferences. Furthermore, technologies, information and culture are continually re-shaping production, distribution and consumption, as well as the interactions among them. In the end, the state of many dimensions of human wellbeing, including the health of people and the planet, are determined by these diverse interlinked food systems and consumer choices made within these systems (see figure 1).



Of course, there is also potential risks associated with such approaches. Ruttan (1984) emphasises that the success of many rural development pilot projects has been due to relative intensity in the use of human resources devoted to organization, management, and technical assistance. When attempts were made to generalize respective pilot project as the model for a national or regional rural development programme, the intensity of human resource input could not be sustained. Furthermore, the administrative freedom to tailor programmes precisely to local natural and human resource endowments and capacities and to priority development problems that is often available to designers and implementers of pilot projects is frequently sacrificed to administrative convenience when the projects are generalized in the form of provincial or national programmes.

In addition, low data availability and limitations in analytical capacities may constitute important constraints to truly understand the numerous interdependencies between activities, resource pools and the flows between them.

Putting Theory into Practice

The 'Promoting Resilience in Agricultural Production and Enterprises for Food Security among Subsistence Farmers along the Mekong' Project implemented by CRDT has taken many aspects of the previously mentioned approaches on board.

In the initial stage of project planning, CRDT conducted a Rapid Needs Assessment (RNA), using Vulnerability Reduction Assessment and CRDT Livelihood Assessment technique in combination with other field studies. This was complemented by deep insights of the project area based on 15 years of experience in supporting communities in the area. Following the assessment, activities were defined in a participatory way in collaboration between the target communities and CRDT. It is noteworthy to mention that the poverty levels in the targeted areas are high and levels of infrastructure, public services, literacy and education levels and connectivity to water and energy supply are limited. This had a strong influence on the choice of activities. Weighing up between options in view of feasibility and sustainability was, therefore, particularly relevant and thorough.

The project eventually aimed to (a) increase the sustainable production of food products through cyclical climate resilient agricultural techniques and water management system; (b) strengthen income generation from sale of surplus vegetable

and poultry products and developed and strengthened market networks; and (c) integrate and support cyclical, climate-smart agricultural methods and Farmer Associations within Community Livelihood and Development Plans.

The project built the capacity of four community-based organisations (CBOs) as the centrepiece of its integrated programming approach. This had many positive knock-on effects in relation to other activities and outcomes. First, it helped to improve the communications between them and the Agricultural Cooperative Union (ACU), that was formed and trained, and local authorities (commune and DPoA). This way, villagers were able to better voice their concerns in view of felt climate risks. In addition, they were also better placed to match agricultural production with market demands. Those were better understood following a market study by the project. The ACU was another key vehicle that allowed the smallholder farmers to bulk harvests, to negotiate better contracts and increase their collateral capacity. Consequently, it also broke the dependency on middlemen or intermediaries and increased the value generated throughout the agricultural value chain. The project supported the ACU further by linking it to SHG Finance that provided initial equity and training on managing funds. Adequate and thoughtful supporting activities were provided to promote inclusiveness and trust, a key well-known barrier to improvements in Cambodian value chains.

Model Farm	Individual Model Farm(er)s (IMF)
Advantages	
<ul style="list-style-type: none"> Easier for CRDT agricultural specialist to establish and implement growing schedules Clear and doable business plan Operates full time Obligation to apply all techniques provided Serves as a public training center that everyone has access to Allows poor people to be model farmers 	<ul style="list-style-type: none"> Independent management and less need for guidance (particularly in set-up phase) No need to rent land Relatively easy to manage team and operate farms with other people
Disadvantages	
<ul style="list-style-type: none"> Need to rent land to establish farm Need for continuous strong support by specialist Need for a manager with high literacy level 	<ul style="list-style-type: none"> Business plan and growing schedules needs to be harmonized with additional interests by IMF Voluntary application of techniques introduced and hence potentially not adopted Excludes landless/ resource-poor households Harder for external support to guide and control agricultural practices Diffusion of practices to other farmers in the village potentially harder, if no trustful personal relationship exists with the individual model farmer

TABLE 1: COMPARATIVE ANALYSIS OF MODEL FARMS AND INDIVIDUAL FARM(ER)S

Boosting Income by Well Aligned Improvements in Water Availability, Agricultural Production Techniques, Marketing Strategies and Governance

The project installed an innovative solar pumping system using a floating dock to pump water from the Mekong river to villages that had insufficient water availability previously. Wells became increasingly unreliable due to drought effects and in some areas the groundwater is contaminated by arsenic.



A MODEL FARMER IN KAMPONG DAMREI, BOEUNG CHAR COMMUNE, SAMBOUR DISTRICT WATERING VEGETABLES AT DEMONSTRATION FARM PUMPED FROM THE MEKONG RIVER; MEMBERS OF WATER COMMITTEE MANAGING THE WATER SYSTEM IN FRONT OF ONE OF THE TOWER TANKS INSTALLED BY THE PROJECT (UPPER RIGHT CORNER)

The water system was managed by a water committee consisting of three members looking after the financial matters and technical maintenance. The fees collected from connected households range from 500 to 2000 riel per m³ depending on the type of use. For larger farms, 500 Riel/m³ (big farm), for smaller farms like home gardens 1000 Riel/m³ and 2000 Riel/m³ for domestic water users. The revenues are used to maintain and repair the system. As compared, commercial water sellers charged 5000 Riel/m³ before the project. In addition, users pay 25 USD to connect to the system. This is mostly related to the costs for the necessary pipes and the meter. The overall management worked well, owing to the continuous support by CRDT and a technical service provider. The system was considered very reliable and well-functioning in post-project interviews by villagers.

Furthermore, agricultural techniques in vegetable growing were improved through the introduction of a carefully designed system of demonstration farms, with model farmers acting as extension workers. These demonstration farms used the water made available through the new water supply system. Model farmers helped and encouraged other farmer to adopt new techniques and successfully grow many different vegetables that they had not grown before. The decision to use this approach was an outcome of a comparative analysis between model farm and individual farm support (see table 1).

All participating farmers as well as non-targeted farmers, who voluntarily adopted the introduced practices, have reported significant increases in income due to vegetable sales.

Overall, the holistic integrated approach taken by CRDT has been very successful particularly as the various components aligned well and delivered outcomes beyond the sum of the parts. Replication is encouraged. However, it is important to keep in mind that designing a well-crafted holistic approach requires a very good understanding and analysis of the baseline conditions in the project area. Also, project costs per beneficiary need to be carefully considered and monitored. The consideration related to costs needs to be balanced with considerations related to existing capacities, education levels and purchasing power in the selected project. In this very case, very poor and remote communities were targeted which significantly increased the costs per beneficiary. Low levels of purchasing power is one of the reasons why there is limited numbers of commercial service providers. In order to sustain positive impacts, it will be essential to not exclusively rely on grant-financed NGOs to provide essential services to communities. A fine balance between external support and self-organizing and self-reliant capacities within communities, that the project built with great success, needs to be found in order to lift these communities to another level.

General Inquiries:

Department of Climate Change

General Secretariat of the National Council for Sustainable Development

C/O Ministry of Environment

No. 503, Road along Bassac River, Sangkat Tonle Bassac, Chamkarmon, Phnom Penh

Supported by:

