Dr Jörg Meyer-Stamer is a co-founder of mesopartner – local economic delivery. He is the author of the PACA methodology and other concepts and methods for territorial development (Hexagon of LED; Rapid Appraisal of Local Innovation Systems / RALIS, Compass of Local Economic Development). He works as a consultant, facilitator and trainer on territorial development, competitiveness, innovation and related issues. He is the author of numerous monographs and publications in academic journals.

mesopartner monographs no. 2

Building Competitive Rural Locations

Local economic development around agriculture and agriprocessing: examples and concepts

Jörg Meyer-Stamer (Editor)

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Jörg Meyer-Stamer

Introduction

Jörg Meyer-Stamer

This is a book about local economic development in rural areas. It is organised around 13 case studies from Asia, Africa, South East Europe and Latin America. Many of the case studies present experiences that have to some extent been influenced by mesopartner concepts and methodologies, in particular PACA.[1]

What is Local Economic Development?

Local economic development (LED) means that local stakeholders engage in joint activities to stimulate the growth of their local economy. Normally, local economies are primarily driven by the individual actions of producers and business owners. LED is about also acting collectively.

LED is one of the elements of local development, which also includes social development and community development, and urban and spatial planning. The focus of LED is ultimately at producers and companies. LED has a generic and a targeted component. In its generic component, local government and other players try to make the location a place where it is attractive to do business; we look at this issue in the second part of this book. In its targeted component, local government partners with businesses and their associations, and perhaps other organizations, to create or strengthen a competitive advantage in specific sectors of the local economy; the case studies present various experiences in this regard.

Why is it that local economic development has received increasing attention in recent years? One of the reasons is decentralization, a process that has

1 Participatory Appraisal of Competitive Advantage, see www.paca-online.org.

devolved increasing responsibilities to local governments in many countries. Another reason is the increasing pressure on producers and companies to survive in the highly competitive national and global markets. This has increased the necessity for local actors to create a more favorable environment and a more effective support structures for business. A mayor wants to be seen as a person who delivers jobs to his or her electorate, and LED is the instrument to do that.

The Case Studies

Most of the case studies in this volume are related to donor interventions. Nevertheless, they tell stories of bottom-up development. They also highlight a profound change that has occurred regarding donor interventions in rural areas. None of the case studies refers to the "integrated" rural development approach that was widely used from the 1970s to the 1990s (also, Geographical Information Systems are mentioned nowhere). Instead, they all present experiences that are driven by pragmatism, opportunities, market forces, and a donor approach that emphasises facilitation rather than execution. Some of the case studies explicitly highlight the need for a donor project to get incentives right and to manage expectations properly, i.e. to encourage local people to take initiative and to "own" developmental efforts.

Many of the cases may appear unspectacular. They are not. They tell stories of successful facilitation of bottom-up development processes, something that is radically new in many of the countries covered. All cases involve relatively limited resources and external support.

- Mulberry in Laos: This case study presents an experience where a crisis is converted into an opportunity, and where stakeholders at the local and regional level manage to connect to the national and supranational level in order to improve framework conditions for their development.
- Pangasius in Vietnam: This is the only case study that reports on a public private partnership, involving a German importer that spotted a market opportunity for organic fish.

- Dairy in Indonesia: This is a case that shows how actors at a regional level can overcome fragmentation and unleash strong dynamism in a sector with strong demand.
- Cutfoliage and dairy in Sri Lanka: This case study is particularly interesting in showing how a donor project can, through a light touch approach, catalyze the initiative of local stakeholders.
- Sugar in South Africa: This case study shows how a mentoring model can be created and implemented at the local level.
- Broiler in Macedonia: This is a case where a donor facilitated a process where a new value chain emerged after the old socialist production system had collapsed.
- Dairy in the Dominican Republic: This is another case study that shows how a bottom-up process can move a sector forward that involves a variety of public and private actors who without active facilitation may spend their time fingerpointing rather than problem-solving.
- Soy in Ecuador: This case study is particularly instructive regarding the difference between development for a certain group vs development by a given group, in this case various actors involved in the soy value chain in Ecuador's leading soy producing region.
- Mango in Peru: This is a story of high learning cost and persistence. Local producer associations went through a number of frustrating experiences in international markets until they ultimately found a promising niche in the organic segment.
- Guinea pigs in Peru: This is another example of a project intervention that learnt from earlier failed experiences in terms of issues like identifying a market demand first, managing expectations of producers properly, and betting on the interests of individual producers to improve their income. This case study is particularly outspoken regarding the difference between an association of producers and a producing cooperative, since the latter tends to turn into an unproductive cooperative rather quickly.
- Quinoa and kiwicha in Peru: This case study looks primarily at the agronomical side of introducing new commercially attractive plants in a setting where local farmers have suffered from the inviability of their traditional crop, potatoes.
- A rural town in Guyana: This case study explains the challenges involved in trying to dynamize a locality the depends primarily on remittances and transfers.
- Small farmers in Brazil: This is a case of genuine local economic development, with next to no involvement of higher levels of government or external donors. It shows how an approach that is strictly based on business principles can generate a significant impact.

At the same time, it is important to highlight that all case studies are related to LED, but they are not equal to LED. Most of the case studies relate to localized sectoral or value chain approaches. This is one of the important dimensions of LED. Yet LED ought to involve additional activities, in particular those that create location-based competitive advantages.

The final chapter develops a conceptual perspective at LED. It addresses issues such as sequencing of LED processes, the relevance of strategy the LED, the role of different role players, and the importance of different approaches to LED in fundamentally different localities.

Upgrading Paper Mulberry Production in Northern Sayaboury Province, Lao P.D.R.

Veronika Utz and Jens Kallabinski

1 Brief description of the case, including country, location, period of time

The paper mulberry tree (Broussonetia papyrifera, common name po-saa), the bark of which is being used for paper production, is one of the most important non-timber forest products (NTFP) in the five Northern districts (Sayaboury, Hongsa, Ngeun, Xienghone, Khorp) of Sayaboury Province, Lao P.D.R.

Due to the high demand of raw material from Thailand (80% of the po-saa collected in Laos is being exported to Thailand) the farmers in Laos change from NTFP collection of wild mulberry trees to plantation of paper mulberry as a cash crop. This has the additional effect of substitution of shifting cultivation by a permanent farming system.

Poor quality of po-saa and a huge number of middlemen involved in po-saa trading restrict the income for Lao farmer for both NTFP collection and production on plantations to 1 USD per day.

Starting early 2006 initiatives have been taken to improve po-saa quality by grading and to organize production and trading of the product in order to achieve higher prices and finally boost the local economy. Since po-saa production and trading is a cross-border issue interventions have been taken at both sides of the border – in Laos and in Thailand.

Better quality, reduced number of middlemen as well as organized producer and trader groups led to higher income and attracts more farmers starting po-saa production in plantation.

2 Brief timeline of activities

In a number of studies and events (sub-sector analysis, PACA Exercise (Participatory Appraisal of Competitive Advantage)) all districts score po-saa with high priority for local economic development due to the big market demand in neighboring Thailand.

Po-saa as NTFP is threatened because of its over-collection; but paper mulberry is easily grown in plantations and can replace shifting cultivation, one of the major land use problems in Laos. Two sub-sector studies (Kuklinski, 2005 and 2007) confirmed po-saa as a potential product to improve the local economy by being an ideal cash crop, especially focusing on poor upland farmers. The tree is ideal for upland cultivation because it does not cause any environmental hazards, it grows fast, sprouts easily after cut-back, restores soil fertility through N-fixing symbionts in its extensive root system and suppresses weeds effectively with its large leaves. It can be grown in improved fallows, as a monocrop in plantations or intercropped with rice, legumes, banana trees and others.

During a PACA exercise in early 2006 po-saa has been identified as a promising sub-sector for the two districts of Hongsa and Ngeun. This was confirmed in a way-forward workshop. In 2007 also the other districts of Sayaboury, Xienghone and Khop include po-saa activities in their annual plan of operation.

Three trader meetings where organized in Luang Prabang between the Northern Provinces of Sayaboury, Bokeo, Oudomxay and Luang Prabang in order to strengthen the Lao traders and producers and to establish networking between the different po-saa stakeholders in the ongoing po-saa activities in Lao P.D.R.

Collaboration between the GTZ Program Rural Development in Mountainous Areas of Northern Laos (RDMA) in Sayaboury – implemented in cooperation with IFAD financed Rural Livelihoods Improvement Program Sayaboury (RLIP) – and the Thai-German Program for Enterprise Competitiveness, Component Eco-efficiency, was agreed on in a coordination meeting

in July 2006 in Bangkok in order to enhance quantity and quality of po-saa production in Sayaboury and Bokeo in the cross-border trade with Thailand.

Breakthrough: Lao Thai cross border cooperation

The University of the Thai Chamber of Commerce (UTCC) conducted the "Study on Saa-paper-related Cross-border Cooperation Issues" supported by the Thai-German Program for Enterprise Competitiveness which was introduced to the Lao stakeholders in the first Lao-Thai po-saa cross border trade workshop in December 2006 in Luang Prabang. As a result of this workshop, a po-saa quality improvement training for producers and traders in the two districts of Ngeun and Hongsa in Sayaboury Province was conducted by Thai trainers. In the training, a pilot trade between a Lao district trader and Thai factory (breakthrough) was established, which lead to the elimination of Thai middlemen and makes higher prices for Lao producers possible.

Crisis

The unclear situation of NTFP tax-collection by government authorities and the insecure land tenure situation form a permanent threat to po-saa production in Sayaboury Province. In Luang Prabang, for example, po-saa is officially no longer taxed as NTFP. The local authorities have been encouraging po-saa cultivation since the 90s and streamlined the export procedures to be much more convenient and efficient than the procedures in other provinces. The traders were supported by exempting them from the Natural Resource fee on cultivated bark throughout the province which led to higher prices for the producers.

3 Driver of activity and other relevant stakeholders

Only recently the Lao government became aware of the potential of po-saa for the national revenue in terms of internal value adding and export tax. Only a few months ago the Department of Production and Trade Promotion (DPTP) and International Trade Center (ITC), Ministry of Industry and Commerce, have included Lao po-saa in their International Trade Data Base and have produced a 16-page Investment Brochure titled "Investment Perspective – Lao PDR and the Po-Saa sub-sector". This is an encouraging development.

Nevertheless, the District governments (Agricultural and Forestry Extension Office - DAFEO, Industry and Commerce Office - DICO) and trader groups are still the main drivers of the activities and score the sector with high priority for their local economic development. Hence, the provincial government Sayaboury supported foreign direct investment (FDI) by providing a land concession for po-saa plantations to a Lao-Thai joint venture with the Thai Arms Enterprise in Sayaboury district.

The policy at district level focuses on extension and registration (land certificates) by DAFEO for po-saa plantation areas. DAFEO and the provincial government concentrate their efforts in the transition from paper mulberry as an NTFP into an agricultural cash crop. However, at the moment paper mulberry is still considered as NTFP in Sayaboury Province and exporters have to pay the Natural Resource tax and export and turnover taxes, which reduce consequently the profit for traders and farmers. DAFEO also strengthens the farmers by setting up producer groups and supports cultivation by providing technical training.

The Industry and Commerce Office (DICO) strengthens the traders by initiatives to set up po-saa trader groups and links them with traders from the other districts. Some efforts are planned to reduce the number of steps in export procedures to support the flexibility of the trade chain.

Traders will extend their quality management training to more villages and will follow-up regularly village meetings as well as village exchange visits throughout the districts in order to increase quality and quantity of po-saa.

RDMA-RLIP has been facilitating the process since early 2006 and established linkages to other initiatives and projects like CIAT Asia (Centro Internacional de Agricultura Tropical), SNV (Netherlands Development Service) and the Thai-German Programme for Enterprise Competitiveness. The Thai-German Programme and RDMA initiated the first Lao-Thai Po-saa Cross Border Trade meeting to present the Thai study of the assessment of the paper mulberry sector on both sides of the border. As a result, a po-

saa quality management training was conducted together with Thai trainers in Hongsa and Ngeun district and a po-saa pilot trade with a factory in Chiang Mai is being set up, focusing on opening more direct market channels to processors in Thailand. RDMA-RLIP also supports the strengthening of traders by conducting Trade Forums with different stakeholders to identify main obstacles in the po-saa trade chain and to find solutions together with farmers, traders and government offices.

The RDMA Program in Bokeo Province focuses its efforts on the research of quality improvement through improved processing methods of the bark (e.g. cleaning machine).

The project of CIAT-SADU (Small-scale Agro-enterprise Development in the Uplands) has chosen the paper mulberry sector for its agro-enterprise development approach in a village cluster in Luang Prabang Province.

The above mentioned Thai-German Program for Enterprise Competitiveness aims at strengthening "eco-efficiency" (i.e. economic competitiveness through lower environmental costs) of smaller paper producers, which suffer stagnating profits. Strategies include less use of chemical dyes, development of an eco-friendly label, sourcing of better raw material, product innovation, and improved marketing in order to compete with increasingly dominating big industrial producers.

4 Innovation in terms of production, processing, collective action and enabling environment

Po-saa plantations are being supported in order to substitute NTFP collection and to reduce shifting cultivation of the upland villages. The promotion of bark collection around the year shall contribute to reduction of seasonal peaks and guarantee the farmers a constant income from their po-saa plantations as a cash crop.

Two selected villagers will be trained at the Thai Siam Promprathan factory in Chiang Mai to become service providers for quality management (e.g. drying and grading) for producers in the districts. The farmers will be directly supported by a simple training manual for their consideration in the quality management services.

The introduction of quality improvement management enables producers and traders to provide high quality bark for higher prices. The process will be supported by promotion of producer and trader groups which will strengthen their market power.

The enabling environment for po-saa cultivation has been the contents of recent studies and reports produced by government and international agencies. They have, to some extent, informed the central decision makers about the potential of po-saa cultivation for the improvement of rural livelihoods. For po-saa promotion Lao government and customs facilitate the simplification of export procedures like Lao-Thai AISP (ASEAN Integrated System of Preference) which includes po-saa bark into the list of privilege to the waiving of import duty. Besides, EU (European Union) countries have also granted a privilege for the import of Lao natural products.

The pilot cross-border trade contributes to the development of sustainable trade chains.

5 Plan and achievement, including unmet objectives and unplanned achievements, main beneficiaries

First achievements included:

- plantations substitute NTFP collection;
- increased market supply;
- improved product quality;
- increased income for farmers and traders through higher prices.

Not yet met objectives comprise:

- government still too regulative regarding organization of traders;

- added value within the value chain of paper production from po-saa in Laos (pulp production).

The development of pulp production capacities in Laos seems to be an attractive strategy. This should go hand in hand with the development of a national grading standard with the perspective diversifying Lao's exports and reducing the dependency on the Thai market. Not yet clarified questions are however: (1) optimal site for processing plant (either in Luang Prabang or Sayaboury Province), (2) necessary investment costs and investor, (3) future handling of import tax for processed products imposed by Thai Government (after starting AFTA in 2008) (4) handling of environmental problems caused by pollution during the production process (chemicals are used to bleach and to dye the pulp, the wastewater runs freely into surface and ground waters, which harms the environment and causes health problems among paper workers). Technical assistance in processing and guidance to environmentally friendly production techniques might be provided by Thai-German Program for Enterprise competitiveness.

Main beneficiaries are producers and traders.

5 Critical success factors

At local level the high pressure to substitute NTFP collection and shifting cultivation by permanent cropping is supporting the establishment of plantations. But there is a need to demonstrate whether it is economically worth while for producers to change their strategy and to cultivate po-saa. Furthermore it would be necessary to open up more direct market channels to processors in Thailand (as initiated in the posa cross-border pilot trade) to enable better prices for the producers. The Thai side is dominating the price structure in the chain; in particular, two big traders in Thailand can be said to be the major players in chain governance by setting the price for each season. On the other hand the Thai paper mulberry sector is very vulnerable to shortages of supply from Laos.

The described initiative needs strong interest of and support by both province and district governments for a successful implementation. While the district governments show a high responsibility for the po-saa activities, the province government still is too hesitant in providing the necessary regulations for a better business environment. As the district governments are bound to the province regulations the process often slows down. At national level the Lao and Thai governments will have to contribute by improving enabling environment due to liberalization of trade, especially in the taxation of semi-processed products (e.g. pulp) from Lao to Thailand.

The market demand for po-saa is still increasing. The value of the estimated volume of 10.000 tons per year po-saa bark from Lao to Thailand is estimated at 5 Mio USD. This comprises about 80% of the po-saa processed in Thailand, which is exported as either graded bark (Super A and A grade, mostly to Japan) or specialty papers and handicrafts to markets in America, EU, Japan and Hong Kong, generating approximately 50 Mio USD. Thailand exports 3% of the total world exports of handmade papers and handicraft items, which represent the highest value added products for the po-saa sub-sector. Lao shares only little benefit as raw material supplier so far. But there is a growing market also in Laos. There are some small enterprises in Luang Prabang producing handicrafts for the tourist markets. However, it has been indicated some potential as many handicraft sellers have been asked to export or placed some order by many foreign tourists. There are three options for Laos for export: (1) raw material, (2) semiprocessed products (pulp) and (3) final handicraft and other products. The ability to set up a clear product strategy will strongly influence the success of po-saa cultivation and increase the market power of Laos.

One strategy could be to develop pulp production capacities at a large scale in Laos. This would go hand in hand with the development of a national grading standard with the perspective to diversify Lao's exports and to break up the dependency on the Thai market.

Due to lack of alternative market channels and being dependent on cash forwarding from Thailand Lao less influences the market. So in terms of a future for the Lao po-saa sub-sector, both, relevant private sectors and government offices should take lead in promoting processed products and dried

bark and looking for new markets. Having alternative and diversified market chains leads to gaining better bargaining status.

6 Biggest surprise

The process development by now is far more satisfactory than expected. The local governments indicated ownership by including po-saa as a subsector in their policy in the socio-economic 5 years plan. In the long term this will lead to sustainability.

The initiative develops its own dynamic and needs only few key interventions. The first intention to increase the income for farmers by improved quality of the exported dried bark has broadened up and focuses now also on the value adding in the country by semi-processing the bark (pulp) or processing final products.

The Lao-Thai cross-border cooperation led to different activities between government and international organizations. The biggest success is that the national government is now aware of po-saa and promotes the subsector. Within the organizations and agencies which are supporting different po-saa initiatives, RDMA Sayaboury has come to play the key role in facilitating Lao-Thai cross-border po-saa trade to ensure fair distribution along the value chain and also involve appropriate technology, e.g. economic and environmental friendly pulping technology, initiating the Private-Public Partnership Approach (PPP) and Small-and Medium Enterprise (SME) Development.

7 When and why could the initiative have collapsed, but did not, and why not?

At the beginning the lack of communication between different stakeholders for preparation of workshops and other joint events led often to insufficient use of time and of financial and human resources which hindered the activities quite often. This changed when the district governments recognized the

potential of po-saa and consequently included po-saa in their socio-economic development plan for the next five years (2006-2010). They show more commitment now. Nevertheless, district and provincial governments are still setting sometimes different priorities (e.g. parallel governmental meeting jeopardized po-saa training for quality improvement).

The ongoing process has also been strengthened and stabilized by the involvement and cooperation between different government offices and organizations at Thai and Lao side. The Thai side is particularly interested in the supply of environmentally friendly and sustainable produced po-saa bark from plantations. Lao government officials have recognized their market power due to the urgent need from the Thai side to develop a pilot activity for developing and applying grading standards with Laos. The quality of the raw material from Laos is the most important economic factor for the enterprise competitiveness of the Thai producers (reduction of production costs).

The cooperation in environmental issues led by RDMA, GTZ Thailand and the Department of Environmental Quality Promotion (DEQP) of the Ministry of Natural Resources and Environment in Thailand gave an important input in the cross-border activities.

8 Concept and methodology explicitly or implicitly being used

Sub-sector analysis / studies: The selection of paper mulberry sub-sector was based on a balanced set of criteria, including the economic relevance and potential for upland farmers, the relative market value and environmental compatibility and thus scored high from all five district governments.

PACA exercise: During a PACA exercise in Hongsa and Ngeun districts in January 2006, paper mulberry was selected as one of six sub-sectors, which are most promising to improve the local economy. Several proposals came up during the way-forward workshop mainly concerning methods of quality improvement.

Value and supply chain analysis: Quantity and quality improvement have been identified as the most important interventions in the po-saa value chain.

Development of training concepts: A training manual will be developed by RDMA and GTZ Thailand based on the po-saa quality improvement training in Hongsa and Ngeun districts. The information brochure and further trainings in the villages in all five districts will lead to an improvement of the bark quality and further propagation.

Development of a supporting BDS provider system: Two very skilled and motivated villagers with leadership qualities will receive support from RDMA to participate on quality improvement training at Siam Phromprathan Factory in Chiang Mai. They will later on offer their services to all po-saa producers in the five districts.

9 Relative importance of market and market failure, government and government failure, network and network failure

The world demand for mulberry pulp is increasing faster than the supply capacity. The size of the market has been globally expanding from 2001 to 2005 by 15% in value and 14% in quantity. The biggest world importers of this product are France, Japan, Netherlands, Nigeria, UK, USA, Ireland, Korea, Belgium, Australia and Germany. Regionally, Korea, India, Bangladesh and Vietnam are the dynamic importers of handmade paper products, with India being fastest expanding. The closest competitor of Laos in this market is Thailand. Recent studies have indicated that Laos exports 10.000 tons/year of po-saa to Thailand, providing revenue of 4.7 million USD. The total quantity used in Thailand is some 15.000 tons/year. 80% of po-saa bark used in Thailand is supplied by Laos. In Thailand po-saa is graded and processed into a number of commodities of which handicraft items represent the highest value added products of the sub-sector. The demand for dried bark in Thailand grows by 20% and in China by 17% per year. Laos has been almost totally raw material export oriented over the last two decades.

Due to the lack of alternative market channels and being dependent on cash flow from Thailand, Laos less influences the market. It is not expected that Lao po-saa products will be sold across border soon because Thailand, Vietnam and China have already been processing and marketing po-saa in the regional and overseas markets. However, Laos has the potential to sell pulp, the semi-processed product, to Thailand (Chiang Mai, Chiang Rai) and po-saa paper to the Chinese tea industry, where po-saa paper is used to make dipping tea bags.

The high market demand for po-saa works as pull factor for the district governments, they are a supporting factor. The strategy of the provincial government is still unclear, a fact which leads to a possible risk of the initiative. Whereas the current sign of the national level to include po-saa in their International Trade Data Base and to publish a Investment Brochure about investment perspectives in the Lao po-saa subsector as well as the facilitation to simplify export procedures is encouraging. From the Thai side the Office for Small-Medium Enterprise Promotion (OSMEP) cooperates with the Lao government to inform about changes in duty rates and other issues related to export-import in the paper mulberry trade. But there is still not clear if there will be a tariff escalation imposed on processed po-saa products from Laos to Thailand.

Networking between different supporting institutions (projects, programs, donors) facilitates the development of a common approach (e.g. strengthening of trader networks, set up of marketing information systems, trade strategy). Strong support of different institutions might lead to stronger competition and oversupply.

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Upgrading Fish Farming in An Giang, Vietnam

Cao Thanh Van

1 Brief description of the case

Out of 13 provinces and cities in the Mekong Delta, An Giang has a very strategic position. It has been known as the cradle of rice and pangasius of Vietnam over the last years.

"Pangasius" is a fish variety that has turned into a major export product. It has changed rapidly and radically the province's socio-economic situation since the pangasius production and export have contributed over 30% to the whole country's export of pangasius in 2006.

The project described in this chapter started in 2003 within the context of a Public Private Partnership between GTZ and Binca Seafood, a fish importer from Munich, Germany. National and international partners piloted the world first organic pangasius production.

The project has been divided into 2 phases:

- Phase 1 was from 2003 – 2005: to develop and establish organic pangasius production
- Phase 2 runs from 2005 – 2008: to improve the conventional pangasius farming to meet the major demanding markets' requirements like EU and Japan. The major interventions during the second phase are:
  - Develop EurepGap standards and certification scheme for pangasius together with EurepGap/FoodPlus and experts in the country
  - Develop the business services market for the sector (consulting, coaching, auditing, branding, marketing)

  - Pilot implement the EurepGap pangasius standards
  - Pilot certify farms
  - Disseminate information on both organic and conventional market opportunities and requirements

2 Brief timeline of activities (bullet list) – important events, turning points, breakthroughs, crises

Mid 2003:

- Project set up with Binca Seafoods, Naturland and local partners (An Giang Fisheries Association) in the form of a Public Private Partnership (PPP)

2004:

- May –June: start the organic farming
- PACA exercise to evaluate the pangasius value chain in An Giang (Dec.)

2005:

- Jan: First harvest of 50 tons of organic pangasius
- Two studies conducted to analyze the BDS for the pangasius value chain and possibilities to develop conventional standards for high demanding markets
- 450 tons of raw material and 115 tons of finished product (fillet)

2006:

- Organic production: 1.200 tons raw material and 350 tons of finished products.
- Establish the Technical Pangasius Working Group (PWG - on voluntary basis / willingness) to develop the EurepGap standards for pangasius

- Two meetings by PWG member to discuss issues regarding the standard development

2007:

- Organic production (estimated): 1.800 tons of raw material
- Jan. : Draft of the pond module
- Mar.: Review of the Aqua Base module of EurepGap (existing) in pangasius perspective
- End of April (plan): Draft of hatchery / fingerlings module
- Early May (plan): Draft of cage / enclosure module
- Jun. (plan): Final compilation of the whole standard and sending to EurepGap/FoodPlus for Sector Committee Review
- Aug.: Start with the pilot farms

3 Driver of activity, main initial motivation or problem, other relevant stakeholders

2003 is an important milestone for pangasius production in Vietnam. First of all, the bird flu outbreak changed the daily menu of millions of people around the globe from white meat (chicken) to white fish. Secondly, the US antidumping suit against Vietnamese catfish served a life long lesson for farmers in the Mekong Delta and they started searching for new markets which were then Europe and Japan.

Responsible farming was not an issue for farmers, they were not even aware of the problems. Farmers tended to see only short term benefits which help them tackle the daily survival problems instead of taking care of other issues like environment and sustainability for the long run.

Strict regulations of importing markets like EU and Japan which reflect the consumer concerns about the safety, hygiene and quality of the products caused many troubles for exporters from developing countries like Vietnam. Container after container of seafood products had been rejected due to over-

use of antibiotics or green malachite found in the products in importing countries.

In this context, there was a brave and innovative initiative to produce the world ever first organic pangasius. The organic fish could address all of the above mentioned problems Vietnamese seafood in general and pangasius sector in particular was facing.

4 Innovation in terms of production, processing, collective action and enabling environment

This was the first time that an organic standard for pangasius was developed, implemented and certified. The standard and then farming practices take into account the consumer concerns like

- product safety & quality (use of antibiotics, organic feed, density, etc.);
- production conditions for farmers and workers (social, hygiene, health);
- surrounding communities and environment (waste disposal, effluents, Feed Conversion Ratio - FCR);
- and last but not least the ethical aspects regarding fish treatment (transportation conditions to make fish stressed, processing techniques like stunning, etc.).

This very organic project raised the interest of other farmers and processors in the regions to produce this higher value product and get into the niche market. It as well attracted the attention of and pushed the authorities to take certain actions like establishing new approval procedures associated with the importing of organic feed, which was totally new to the domestic market.

A series of policies, campaigns and decisions from the central and local governments have been issued. The Government is calling for pangasius farms and processors to work towards a common brand of Vietnamese pangasius: Top Quality Pangasius from Vietnam. Additionally, the Government also provides quality control services to help pangasius exporters make sure

that their fish will not be rejected at the borderline due to the unmet requirements of importing markets.

As the production of organic pangasius has been expanded and is expected to grow even more rapidly in the next coming years, there have been ongoing talks about setting up a fish feed plant where organic feed can be produced locally in order to reduce the production costs which in its turn means increased the profit margin for farmers and create more jobs for local communities.

5 Critical success factors

The most critical factor in the whole project has been the fact that Binca Seafoods is the driving force in the whole production chain and it secures that farms' output is purchased. Market is the most important concern for farmers. They always fear that if they go for something new, they would not be able to sell their products afterwards.

The second factor is the selection of the right farmers with long vision to participate in the project. With AFA as one of the main partners of the project with its over 800 members in the province, AFA recommended the right farmers for the project who have the right awareness of producing organic fish and are still actively involved in not only organic production of pangasius but also safe conventional production as well.

6 Biggest surprise

Having seen how successful the organic production was going on, the biggest Seafood company in the province has established a pure pangasius union (in 2005) with its 32 farmer members producing 61.000 tons of pangasius in 2006. Although it is not part of the organic project, however, the indirect impact of the project is quite obvious. More and more farmers and processors are going for more responsible and safe practices. They are more

aware of the market requirements especially in terms of hygiene and safe and quality products.

This tendency even goes beyond the province borderlines. Other provinces / cities in the Delta like Dong Thap and Can Tho have "imported" the idea and started setting up their own "safe" or "pure" farmer groups.

7 Concept and methodology explicitly or implicitly being used

There are two main approaches being deployed by the project: PPP and value chain. These two concepts complement and work very well with each other in a number of projects of GTZ.

One of the outcomes of the PACA exercise of the pangasius value chain in December 2004 was the information flow and information sharing between different actors of the chain (as still reported recently in the media). For years, farmers kept complaining that processors pay low prices and put pressure on their necks while not understanding what difficulties they have to face (increase of input price, diseases, etc.). At the same time, processors claim that farmers are not loyal, when the price goes up they don't keep the contract and sell fish to whoever pays more.

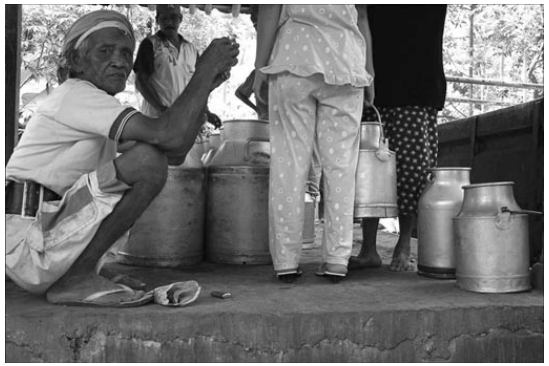
The value chain approach brings the actors together to join their efforts in looking at the difficulties each of them is facing and seek for collective solutions. The value chain does not only link the actors at different stages of the whole chain but it also unites farmers and processors horizontally in order to strengthen their capacity at those stages.

The PPP approach is another method being used in this project. It has been expanded to include not only more private partners (local farmers and processors) but also the local authorities (Department of Fisheries - DOFI) to co-finance and co-implement the second phase of the project. DOFI has officially established last year. DOFI is actively involved in organizing different training courses together with GTZ to train the trainers and farmers in many subjects to improve the pangasius value chain in the province.

8 Relative importance of market and market failure, government and government failure, network and network failure

The establishment of the Agifish Pure Pangasius Union was, on the one hand, a positive sign of the market movement, it created a headache for the organic project and confusion in the market on the other hand. The name of the union initially was Agifish BIO pangasius. The “Bio” word is associated with the organic in most of the countries while the fish produced by this union has not been organic but rather “safe”. Binca had to make a lot of efforts to talk through this issue with the Agifish itself and with the authorities in order to eliminate the confusion. After about a year or so, the efforts of Binca reaped the result, Agifish changed the name from “bio” to “Pure” like it is nowadays.

The problem was that although the Ministry of Fisheries launched a campaign in late 2004 to promote the brand “Top pangasius from Vietnam”, it seems that stakeholders just do not work much towards making this brand stronger. Instead, every company and exporter has its own brand and this is not in association with the country’s common brand for pangasius from Vietnam.



The Role of Stakeholder Forums in Local and Regional Economic Development (LRED): The case of the Boyolali Milk Cluster

Daniel S. Nugraha and Hayder Al-Bagdadi

1 Brief Description

Fresh cow milk does not belong to the typical diet of Indonesian people. Nevertheless, the consumption of dairy products, in particular various products of milk powder, is relatively high amounting to 3.75 million litres per day. Domestic production can only provide 1.15 million liters per day, almost one third of the domestic demand, so that there is an enormous excess demand. Another characteristic of the milk market is that it continues to expand as the demand, particularly for infant milk powder, increases with population growth of 3 millions annually (equivalent to 1.4% population growth rate of 220 million people). Additionally, the world market price for milk shows an increasing tendency since 2007 resulting in higher production cost for dairy industries that depend on imports. These conditions provide enormous potential for economic growth of domestic dairy production in Indonesia.

2 Driver of activity and other stakeholders

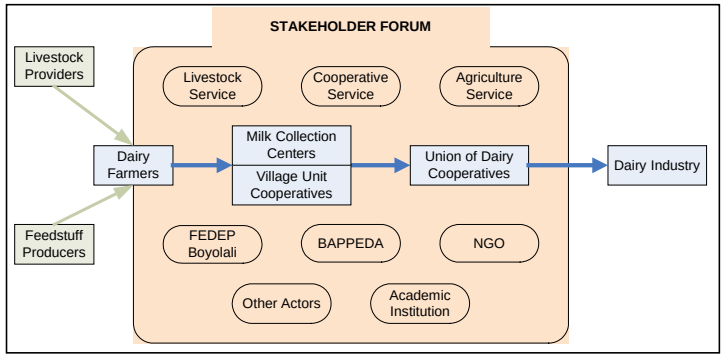
Boyolali – a sub-district in Central Java – was one of the largest and best-performing milk production centers in Indonesia. However, since the last decade the quality and the quantity of the milk produced in Boyolali has been deteriorating. The farm-gate milk price is also stagnating, thereby trapping the smallholder dairy farmers in constant poverty. Improvement measures have been undertaken to revitalize the milk cluster. But since there

is a lack of coordination and cooperation among the existing stakeholders, the desired results are not yet achieved.

FEDEP Boyolali, a regional stakeholder forum, recognized the potential role of dairy value chain as one of the driving factors in regional economic development in Boyolali based on following considerations: first, the exploitation of excess demand in Indonesian milk market by increasing production capacity can increase the income generation in the region, particularly on dairy farmer level. Secondly, the promotion of the milk value chain has a pervasive economic impact as dairy farming is widely practiced in 6 sub-districts of Boyolali. Thirdly, the improvement of milk value chain contributes largely to the endeavor of poverty alleviation in the region since it directly affects the population with the lowest income, namely the dairy farmers. Based on this identification, FEDEP Boyolali seized the initiative to revitalize the milk cluster.

The first step taken was to apply PACA (Participatory Appraisal of Competitive Advantages) to rapidly identify the strengths and opportunities of the milk cluster by also taking into account its existing bottlenecks and weaknesses. The analysis indicated that in order to use the strengths and opportunities of the cluster, the coordination among relevant stakeholders had to be improved. This led to the idea of creating a communication platform. Since there was the need of a permanent form of communication and also the need of formulating joint strategy for all stakeholders, a stakeholder forum of the milk cluster (Milk Cluster Forum) was founded by FEDEP Boyolali. This forum is comprised of government agents from various departments, smallholder dairy farmers, village unit cooperatives (KUDs), union of dairy cooperatives Central Java (GKSI Central Java), NGOs, etc (see Figure 1).

Figure 1: The Stakeholder Forum of Milk Cluster Boyolali



Brief Timeline

Time	Milestones
2001	Establishment of FEDEP Boyolali
2003	Application of Participatory Appraisal of Competitive Advantages (PACA-Method)
2005	Introduction of Value Chain Approach/Analysis (VCA)
2006	Establishment of Milk Cluster's Stakeholder Forum
2006	Training 'Good Farming Process' in 6 sub-districts of Boyolali
2006	Benchmarking in 2 other Milk Clusters in East- and West Java

3 Innovation (Product, Process, Collective Action)

In the stakeholder forum, it is possible to communicate and coordinate collective action among the stakeholders. After several stakeholder meetings, it became apparent that the grave problem was not only caused by a lack of coordination, but also by a lack of trust among the stakeholders. The training measures conducted by the livestock service were criticized due to the fact that they only cover random areas and farmers (instead of implementing

structured and systemized training programs). The dairy farmers were criticized for their inappropriate dairy farming practices which cause the decline of the milk quality (high germ content). The KUDs were criticized due to the high portion of price deduction from the milk price resulting in low farm-gate milk price. The GKSI Central Java was criticized for being not transparent regarding the mechanism of milk payment system which is based on the germ content, the fat content and the content of solid non-fat. However, through this conflict, each stakeholder perceived their position among other stakeholders and the process of consolidation could be started.

In the Milk Cluster Forum, the stakeholders put forward their capacities and synchronize their programs to benefit from the synergy effects. With regard to this, the forum's work agenda – in which every stakeholder has its specific responsibility for and contribution to achieving joint vision – is annually defined. Practical activities are then executed, monitored and evaluated jointly.

4 Plan and Achievement

Up to now, several outputs have already been generated by the Milk Cluster Forum. Training courses on Good Farming Practice to enhance the dairy farmer's know-how in dairying process, particularly in aspects relevant to process and product hygiene, were held in all 6 sub-districts. The result of the training is periodically monitored (by the livestock service) and reported to the Forum as feedback for further improvement of program and strategy. Farmer groups were also established to facilitate the training and monitoring processes. The training has resulted in the reduction of germ content and thus higher milk quality. Nevertheless, the milk price has as yet not significantly increased since the training and monitoring program is still in initial phase and has not yet reached the majority of the dairy farmers.

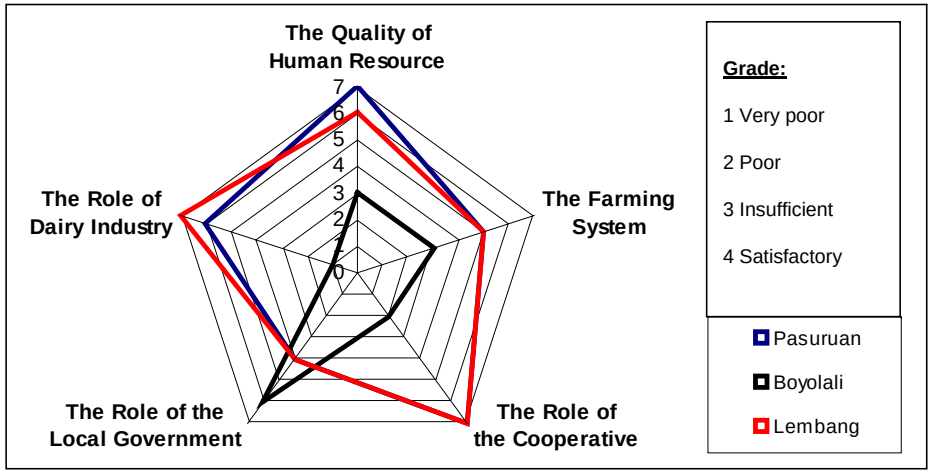
The Milk Cluster Forum applies the Value Chain Approach to formulate a strategy in increasing the systemic competitiveness of the dairy value chain. The benchmarking activity conducted against two other, better-performing milk clusters (in West- and East Java) brought fruitful results regarding up-

grading potentials in increasing the value chain's efficiency, e.g. by cutting out unnecessary economic actor from the chain. Directly linked to dairy industry, KUDs can avoid unnecessary costs and can profit from technical assistance provided by the dairy industry. The discovery of this option gives the dairy farmers and the KUDs a stronger bargaining power against the monopsonistic role of GKSI Central Java, which in turn responses to this alternative by committing to provide better services to the KUDs and dairy farmers.

5 Critical Success Factors

The benchmarking activity has singled out 5 critical success factors (CSFs) for the milk cluster (see Figure 3).

Figure 3: Benchmarking Results against Milk Clusters in East- and West Java



6 What was the Biggest Surprise?

From the benchmarking results it is evident that the successful promotion of dairy value chain relies starkly on the empowerment of value chain operators, namely dairy farmers, cooperatives, and dairy industries. In particular, the support to cooperatives as producer associations in establishing/improving their embedded services to the members (training, monitoring, access to finance, etc.) is the key to sustain the improvements achieved, namely by institutionalizing improvement measures or integrating improvements into existing structures. This provides a much more sustainable way in improving technical capacities of dairy farmers than undertaking stand-alone training measures. Moreover, the benchmarking results confirmed the necessity of a close cooperation with the private sector, since dairy industries have big interests in securing the supply chain and they also have specific technical expertise on the dairy sector.

The LRED has overcome the critical point of being discontinued due to lack of support. This success relies profoundly on the active participation of the relevant stakeholders and the harmonization of interests. In adherence to this, the tools/instruments applied in LRED use a bottom-up approach which stimulates the initiative of local actors to seize development initiative. It is also important to mobilize and to utilize local resources (physical, human resources) and thus building the capacity of local/regional actors in a sustainable manner. Various interests from numerous actors may lead to conflicts and disputes; but by establishing a good communication platform, each stakeholder has the chance to articulate its ideas, concerns, and demands and thereby opening the opportunity of building joint vision which incorporates all interest groups. In this respect, the stakeholder forum which bears the coordination function can contribute to the establishment of joint strategy and program.

7 Relative Importance of Market, Government, and Network

Basically, the linkages in the dairy value chain are rules by market forces, yet not in an optimal way (monopsonistic role of GKSI Central Java, oli-

gopsonistic role of dairy industries). In order to correct this market failure, efforts are taken to empower the bargaining position of the cooperatives (dairy farmers). The cooperatives also simultaneously explore the possibility of directly selling pasteurized fresh milk as a product innovation to local consumers (schools, public institutions, etc.).

The government plays the role as the initiator of LRED and empowers local stakeholder to actively participate in the conception, implementation, and monitoring of LRED. This is particularly achieved by establishing a strong stakeholder network which is then institutionalized in a stakeholder forum.

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Upgrading Rural Producers in Kurunegala District, Sri Lanka

Sanath Vidanagamage

1 Brief description of the case

Kurunegala district is situated in the North Western province of Sri Lanka. Important sectors in the region are cut foliage (the green material that goes into flower bouquets) and milk production.

The cut foliage sector grows and supplies different varieties of ornamental leafs for decorative purposes, mostly sold to European countries. This sector was selected for developmental activities under the Local Economic Development Project of Swisscontact-Sri Lanka (SCSL) as a result of a LOCA Appraisal[1] in September 2005. SCSL facilitated to implement two rounds of LOCA based activities, especially quick win activities as the initial stage.

Smallholder cattle farming is one of the main economic sectors in the district. Project started dairy sector development activities since 2006 followed by three locational LOCAs. The sector has an outreach of 600 farmers around the four divisional secretariats (DS) of Kurunegala district. The income of 60% of the smallholder farmers remains below the national poverty line while they were fulfilling only 35% of the raw milk demand from dairy processing companies.

During the LOCA and post LOCA activities the SCSL project created more opportunities for key stakeholders to meet and discuss the problems and their root causes, cause of the causes and respective solutions for dairy sector. This iterative process increased the active involvement of the poor and marginalised communities within the local economic fabric of the four DSs.

1 LOCA (Local Competitive Advantage) is the denomination of the PACA methodology in Sri Lanka, where the word PACA has a negative connotation.

2 Brief timeline of activities

The first LOCA appraisal was conducted in Maspotha division, one of the localities in the district, in September 2005. A LOCA way forward action planning was conducted in November 2005; it was noted then that some growers were not so active and lacked credibility. Subsequently, there was close monitoring and guidance from SCSL, which did not offer grants, though. A review of short term activities and progress was conducted in June 2006. It showed little interest for short term activities. At a second round of action planning in July 2006, more learning and interest on further short term activities for more improvements was emerging. At the second review of progress, more tangible results were noted and a high interest to go a step further with more medium and long term activities was voiced. A year after the initial LOCA Exercise, SCSL facilitated a workshop using the Compass method[2] in order to assess progress, set up overall goals and plan more strategic activities, such as product diversification and setting up a Foliage Marketing Centre.

Additionally, more LOCA exercises were conducted in 2006 and 2007 in other divisions of the district.

3 Who was the driver of the activity?

SCSL acts as a facilitator. Activities on the ground are driven by local actors. For instance, in the case of cutfoliage there are two motivated sector leaders. First there is Mr. Herath who lead the process from the beginning and had a hard time to convince people about the effort. The second leader

2 The Compass of Local Competitiveness is a performance management method that has been developed by mesopartner, cf. www.mesopartner.com.

is the micro credit provider in the area, Minhettiya Sanasa Bank, who initiated to learn first and then to take the risk by providing a loan for growers.

For the first time the group of smallholder growers met some large scale growers and exporters and learnt about extremely high demand and unbelievable prices the exporters pay for what they can get from the middlemen.

Large scale growers were involved in providing better technology to increase production and quality of the smallholder growers.

4 Which innovations evolved?

In the first months after the LOCA Exercise, the **cutfoliage** growers

- were able to become more organized,
- they reduced the cost of inputs through an organized buying system,
- they got connected to an exporter,
- they obtained sector specific small loans easily
- they have increased per leaf price by 100% through organized-selling and expanded production to meet the volume of orders as the number of growers have increased.

With this impressive results of the quick win stages stakeholders then turned the scope of the process to medium and long term development activities in order to become more competitive.Regarding production, highly productive intercropping methods were introduced to grow foliages within the coconut cultivations allowing for maximum land utilization.

Regarding collective action, the group is buying planting materials in an organized way and has been able get a 40% cost saving.

Lack of financial support was a major bottleneck for growers to improve and expand the business as the main banks have no idea about the business and/or industry. After several rounds of discussions with one of the main

micro credit provider in the area, growers now obtain low interest loans with a grace period.

In the **dairy sector**, at the initial point the milk farmers did not know that

- some low interest credit facilities are available (from the provincial authority) for poor farmers,
- there is a high yielding grass variety (called CO3) as a solution for feeding related problems that has been developed by the Veterinary Research Institute (VRI),
- there is a new technology to get a calf from each cow within every 12 months of the year (in the beginning they took about 16 to 20 months to get a calf),
- afternoon milking and 0% grazing can increase milk production by 50%,
- they can rear cows in the medium and large coconut estates owned by rich people in the area,
- there is a possibility to get interest free credits and infrastructure from processing companies,
- the entrepreneurship knowledge and skill can make their business profitable,
- there is a crop-livestock integration method to get high income from cattle and coconut cultivation.
- Also, more than 50% of the farmers had never heard names or knew the services of Veterinary Research Institute or Department of Animal Production which are the key service providers of public sector.

Swisscontact's LED project initiated dairy sector development activities in a time where the farmers seek to sell cows to shut down the small farm to shift in to another business. It was only after the participatory appraisal and through stakeholder driven process of implementation that the stakeholders identified lots of hidden opportunities inside the same obstacles they were worrying about. It was an interesting learning process for the project team

as well in its efforts to make LED interventions more systemic and on the other hand include poor and poorest farmer families within the process.

Most of the micro and smallholder farmers now obtain loans from provincial authority for 8% (annual) since the national interest rates has gone up to 26% (annual). The project only facilitated links and fed information. Provincial Authority is having better repayment (loan instalment is reduced from farmers monthly payment beforehand). Micro and small scale farmers access loans in an easy way and shorter period, i.e. procedures are efficient.

VRI conducted field extensions for farmer associations and now 85% of the total 600 farmers have grown new pasture, CO3, in their own gardens or in estate lands. LED activities involved both Veterinary Research Institute, Animal Production Department and the small farmers within the decision making process. A result was the development of new and highly interactive field extension method (similar to Farmer Field School) which benefits the majority of rural poor farmers. Now these two organisations are willing to continue and extend the new extension service with their own resources. Milk production and the quality of milk (fat and solid non fat) have increased resulting an increase of income of the poor farmer.

A handout developed and published by Veterinary Service (VS) Office created higher awareness on evening milking (second milking). Processing companies identified the opportunity to collect milk in the afternoon and agreed to place chilling units (worth Rs.6,00,000) in villages. Both processing companies and farmers realized the advantage of evening milking. The project emphasised and assisted to exploit the hidden opportunities within the sector. Poor families, who used to milk cows only in the morning, started second milking and have been able to double the income within a shorter period. It was again a result of three party (Farmer + VS office + processing company) dialogue continuously facilitated by Swisscontact.

The village level milk collecting centre has now become not only the milk collector but also the supplier of low priced inputs (feeds and medicine), extension and advisory and small loans. This has become an effective solution for inefficient veterinary extension of public sector. The project helped the milk collector to identify the advantages he has in diversifying his service provision. Special capacity building programme is to be carried out to enable him/her to help, advise and lead the member farmers to improve their own business.

Estate owners (rich people who has estates from 20 to 200 acres) allowed the smallholder farmers to graze and rear cows in their estates. Both understand the advantages of sharing resources to get mutual benefits. Farmers get enough lands to graze cows, and estate owners get free fertiliser for coconut cultivation (low cost and more income). Some estate owners are now ready to invest to buy cows and build cow sheds for farmers on a lease basis. The project made both parties aware and explained the possible benefits, and it facilitated discussions and workshops. It conducted a feasibility study and made reports. After several experiments the project has developed a new concept called Integrated Estate Farm.

Swisscontact LED assisted training providers to develop sector specific entrepreneurship training package for farmers. For the first time in Sri Lanka, dairy farmers were provided entrepreneurship and farm management education. The four day interactive training package became a tool of changing the farming practices in to business practices. So far it has resulted in significant growth of milk production and reduction of costs. The project stimulates the training providers about the opportunity to develop and deliver such training package. The project also supported to design, develop and deliver the trainings for all levels of farmers. Even the low literacy woman has shown tremendous improvements in her business, few months after the training.

Farm waste has become a trouble making source that creates lots of environmental and hygienic problems among farmer families. Know-how on crop and livestock integration is delivered during entrepreneurship training based on farmers experience on fertiliser making. Especially a session is included on “How to increase income of coconut cultivation by effectively using cattle waste as a fertiliser?” The LED project initiated an experimental model on crop (coconut) and livestock integration. It was another new learning for the research institution as well, as the coconut yield has increased by 50% with better use of cattle waste in coconut lands. This was a

blessing for both rich and poor families in the region as the price of a coconut rose from 12 rupees to 35 rupees.

5 What were the critical success factors?

One critical success factor was that SCSL limited its role to mostly facilitating activities, i.e. helping actors to analyze their own situation and facilitating planning and implementation by introducing specific methods and by matching certain actors. Based on this, the main success factors were

- increasing cohesion among the growers and the milk farmers,
- strong contacts with buyers (both for cutfoliage and for dairy) and with veterinary services (in the case of dairy),
- the design of the whole process as a learning process for all the actors involved.

6 What was the biggest surprise?

The group has become bigger and works independently. The involvement of the SCSL project has decreased after 15 months.

7 When and why could the initiative have collapsed, but did not, and why not?

If SCSL had left the initiative after formulating the LOCA way-forward action plan, this change would not have happened, because in a rural setting no-one can expect that the stakeholders of any sector who met and discuss today will start to work together productively tomorrow. Having learned this early with the past experiences SCSL took the lead in facilitating the implementation of the first round of quick-wins with a maximum effort. Then automatically a group of leading growers became motivated and active

and come to the scene taking up and replacing the extra role of the project ha s initiated.

8 What was the relative importance of markets, government and networks?

Markets: There was a market failure due to asymmetrical information and indivisibility both in cutfoliage and in dairy. For instance, in cutfoliage there was lots of unexploited information with the exporters but the growers had never taken the initiative to access them. But the facilitation effort of SCSL was able to make it happen.

Networks: Foliage growers were attached to different associations that operate in Kurunegala district but the problem was that none of these association acts in a market oriented way. There is lot of market information to be exploited by these associations.

Matholamnyama Sugar Farming Progect, Kwa Zulu-Natal, South Africa

Colin Mitchell

1 Brief description of the case

The Isifisokuhle Community is a group of 168 rural farmers in the Upper Tongaat Area of KwaZulu-Natal South Africa. The community is located in the Ndwedwe Local Municipality and is part of the Ilembe District.

During South Africa's political transition many rural areas were in the grips of political upheaval with ordinary people being the victim of violence and intimidation in the struggle for political power. During 1994 and 1995 many (most) of the farmers were forced to leave their land for the safety of local towns. Their land was then either burned out or devastated by neglect.

Up to this time Sukumani, the development arm of the Tongaat-Hulett group, a large sugar producer, had supported small farmers. During the period political uncertainty this division had to be closed down.

By 1997 peace had been restored and the people returned to their land to start again.

In 1998 the people realised that their best opportunity lay in aggregating their land and resources and creating some economies of scale. The group set up a committee and a delegation led by their Chairman, Sipho Joseph Hlope, approached Bray Heenan, a local farmer and close neighbour, for assistance in planting sugarcane. Their objective was to farm the area as one commercial farm, to upgrade the services and houses in the area and to create employment. The land measures 544 hectares and is farmed by 168 individual families (average of 3,24 hectares each). At this time the land was still under the jurisdiction of the Ingonyama Trust (the traditional custodian

of tribal land in the province) and the farmers had no formal leases with collateral recognised by banks. Bray Heenan undertook to assist the farmer group to develop a workable institutional framework as well as to coach them to become competent sugar farmers.

2 Brief timeline of activities (bullet list) – important events, turning points, breakthroughs, crises

The project took seven years from first approach by the committee to the first harvest of 9000 tons in 2005.

1994 – Original small holdings of individual farmers were burned out in political violence

1997 – Returned to the land after political stability returned

1998 – Approached Bray Heenan – a local farmer for assistance

1998 – Submitted a land use plan for the area to Department of Agriculture.

2002 – Land Use plan approved by Dept. of Agriculture and an infrastructure grant of R12.8 million was approved.

- Section 21 Company (not for profit) formed with each member who contributed land a shareholder in proportion to actual land contributed.
- Tongaat-Hulett Group donated 1,200 tons of seed cane.
- Unitrans sponsored the transport of the seed cane

2003 – Contractor completed infrastructure and new roads using the grant allocated by Department of Agriculture.

- Ingonyama Trust approves a 35 year renewable lease on the land

- Land Bank declines planting loan – Farmer convinces Department of Agriculture to advance funding for first planting

- Bray Heenan (acting as a mentor) prepared and planted the first 100 hectares of seed beds using his own equipment.

- Land Bank approves second loan of R2,75m to plant balance of the farm.

2004 – Balance of 320 hectares planted using yield from own seed beds and mentors equipment

2005 – First harvest of 9,000 tons from cutting 60% of the farm – Balance of 40% carried over to 2006

2006 – Harvested 18,000 tons still on the 60/40 harvest carry over split

2007 – Estimate for year is again 18,000 tons

3 Main driver and other relevant stakeholders

The initial driver of the project was the committee appointed by the Isifisokuhle Community. However, it became clear that they did not have the resources or infrastructure to support the sustained effort needed to cut through the bureaucracy and prepare the exhaustive applications necessary. At this time the driver responsibility fell to Bray Heenan.

What is clear is that this project was motivated by a group of people with long established links to the land and a history of subsistence agriculture with a burning desire to improve their lives. It is also clear is that the KZN Provincial government has the financial resources needed to fund projects such as this but lack the resources and networks necessary for practical support. Had it not been for Bray Heenan, his long standing relationship with the community, his contacts with service providers, his understanding of commercial banking and his dogged determination this project is unlikely to have got off the ground.

Another valuable lesson in this case is that Corporate Social Responsibility has a greater impact when applied practically rather than by financial donation alone. Tongaat-Hulett's donation of 1,200 tons of seed cane was catalytic to the project and has also secured them an additional 18,000 tons of cane through their mill. Unitrans' "gesture" of transporting the seed cane (also catalytic at the time) has secured them the contract to transport future crops to the mill.

Once the initial bureaucracy of land tenure and planning had been completed the Provincial Departments of Agriculture and Economic Development performed admirably in awarding contracts and providing technical support.

4 Which innovations were created in terms of production, processing, collective action and enabling environment?

This is a relatively straight forward farming venture. However, there where some complex issues that needed to be handled with circumspection and care. The most significant of these were the following.

1) The development of a business model that recognised the value of land contributed, the value of labour of people working the farm and the need for prudent financial planning to ensure sustainability. The business model agreed stipulates three payment routes:

- Monthly wage for working on the farm.
- Rental income equivalent to 12% of gross revenue and paid in direct proportion to land contributed to the collective farm.
- A share of profits (if any) after provision for next years operating expenses and repayment of loans.

2) Setting aside land to develop their own seed beds that will, over time reduce operating cost and improve production but which, in the short term will reduce gross income.

3) Convincing other neighbouring farmers of the merits of this venture as their past experience with the community in conflict had been fractured at best.

4) Convincing the farmers on whose land the seed cane had been planted to forgo any revenue in the first year and contribute that cane for the planting of the rest of the farm.

5) One innovation that was attempted by the Department of Economic Development was the establishment of a mini sugar extraction mill (Jaggery Mill) as is common in India. This attempt was not successful and the reasons therefore are not clear. However, the three primary reasons given are; failure on the part of the establishment service provider; power of the large sugar mills and the "hold" they exert over input factors and the uncertainty of the application of the technology and suspicion as to why this project was singled out to be an experiment.

5 What was initially planned and what was ultimately achieved?

This Project has met, if not exceeded, all its expectations. It has also proved itself to be a model that could be replicated and already another project has been attempted by the Vusi Community near Verulam in the eThekwini (Durban) Metro. However, this project has not progressed as planned and appears to be hobbled by internal political problems

6 What were the critical success factors in this case?

- The willingness of the community to work together and quality and accountable leadership of the Sec 21 Company
- A committed mentor (in this case more of a project manager) who spoke the language, understood his role as coach and empowered people rather than patronised them.

- The granting of the 35 year renewable lease on the land by Ingonyama Trust.
- The negotiating skills of the mentor who convinced the Land Bank to change its loan policy to be more realistic, aligned with farming reality and allow a margin for reinvestment in the farm. (Note: The initial repayment plan was R100 per ton of cane harvested from year one i.e. 45% of gross income. The revised payment plan is; no repayment in year one and them R30 per ton (14%) from year two.)
- The grant of R12,8m received from provincial government for infrastructure
- The donation of 1,200 tons of seed cane by Tongaat-Huletts.

7 What was the biggest surprise?

- The positive attitude of the Department of Agriculture once the land use plan had been approved.
- That the land bank was prepared to review and approve the loan after it first being declined.

8 When and why could the initiative have collapsed, but did not, and why not?

When the Land Bank loan was declined and operating capital dried up the community and the mentor decided to plant out the seed cane at risk and gamble on this putting pressure on the Department of Agriculture to exert influence on the Land Bank.

9 What was the concept and methodology that was explicitly or implicitly used?

This is a prime example of an approach that has long been advocated in South Africa as the one most likely to lead to successful agricultural transformation. In essence it creates a partnership of the land and labour of emerging farmers with the experience and resources of established commercial farmers. The difference in this case is the fact that Bray Heenan has not drawn the 7.5% of gross revenue (approx R300,000 per annum) to which he has been entitled to in terms of his mentorship agreement.

10 What was the relative importance of markets, government and networks

Choosing to grow sugar cane on this farm was a strategic decision driven largely by the certainty of the global market for sugar in terms of both price and assurance that the crop will be milled.

The second market advantage is the fact that the Tongaat-Hulett Maidstone mill is declining in sugar cane throughput as a result of large tracts of land being converted to residential estates. This ensures that their crop will be in demand and that the mill will make an effort to ensure their sustainability.

An initial concern and one that might have sunk a less resilient community was the bureaucratic red tape that needed to be negotiated during the land use approval process. However, having weathered this delay the benefits of grant funding will ensure that this venture is profitable and debt free within about 6 years as opposed to the 20 years it would have taken if the infrastructure cost had been by way of loan.

In reviewing this project it is also clear that emerging farmers have some way to go in building the relationships and networks needed to gain access to the key influencers needed to facilitate a project such as this.

It was apparent that it was difficult enough for the Bray Heenan to keep driving this initiative even though he was personally acquainted with decision makers at Tongaat-Huletts, The Land Bank and Unitrans. Whether the farmers could have pulled it off without this network is very doubtful.

Relaunching the Broiler Sector in Macedonia

Ljubomir Dimovski

1 Brief description of the case

The Macedonian fresh broiler sector provides only 5% of the total demand for fresh broiler meat.[1] There is an existing infrastructure and equipment (farmhouses) available from the former *kombinats*[2], which, however, is not operating, that can allow an instant initiation of the total demanded quantity if put in function.[3] In this context, two foreign donors in cooperation with domestic organizations initiated and implemented two major projects during the past years.

One of them is BID,[4] implemented as a public private partnership with the main goal to increase employment and increase household income in the rural areas of Western Macedonia. The project envisaged and implemented a new approach which addressed the complete value chain of broiler production. The approach was to facilitate direct linkages between the farmers and processors on a contracting base where the fattening of the broilers is outsourced to the individual farmers. This will result in regional LED where the farmers of the region will be concentrated in one part of the region providing a spill over of knowledge among the farmers, motivation for the others in the region to join and at the same time will provide higher economies, efficiency and control for the integrator, i.e. a processor that will be in charge of organizing the compete system.

1 The country's broiler production is 1 to 1.5 million broilers per year and the estimated country's demand is circa 20 million broilers per year.

2 Kombinat – large vertically integrated state owned agricultural enterprises dominating the agricultural production in ex-Yugoslavia

3 In the era of ex-Yugoslavia with the centrally planned economy Macedonia was the sole producer and supplier of eggs for 23 million people.

4 Broiler Industry Development – 20 months project, up to July 2005, financed by USAID implemented by Care Macedonia

The second project with Care and EPI Centre is being implemented through replication of the described system-business model in Kosovo. The success in Macedonia created an interest for the model given that the Kosovo market consumption per capita for broiler meat is higher and there is no fresh broiler producer on the market so far.

2 Brief timeline of activities

- By the 1990s the former planned market system collapsed and many of the farms and feed mills were unable to survive and stopped the production.
- From 2004 to mid 2005 a USAID financed BID project implemented by Care Macedonia initiated organized integration of the sector through organizing the system where the broiler fattening was outsourced to individual farmers.
- The BID project resulted with increased broiler production, increased the consistency and quality of the product, and first local fresh broiler meat was marketed with a now recognized market brand.
- The project joint with the Macedonian largest feed manufacturer Gica and the Macedonian poultry slaughterhouse to help the setting up of the complete fresh broiler value chain where the integrator Gica will provide the complete set of inputs to the farmers, the veterinary control while the farmers will fatten the broilers and then taken over again by the integrator who is responsible for the packaging, distribution a sales.
- The project was implemented in western Macedonia (a region with a labor force approximately 300 000 individuals), during which 140 households were employed.

- Two suppliers of different parts of the input came out with two separate competitive brands, although both were dependant on each other for separate part of the supply chain.
- *The occurrence of Avian influenza* resulted in a decrease of the consumption level, demand dropped by 80%. The financial consequences have been significant.
- 2006 Care started another project with EPI Centar[5], Skopje, for development of value chain in the broiler industry for enhancement of the regional economic development to further assist the integrator from Macedonia to export their product to Kosovo with a local brand and later on with the assistance of the project when the system is established in Kosovo to be able to supply the Kosovo integrator with inputs and other services.

3 Driver of activity and other relevant actors

The main motivating factor for initiating a project such as BID project has been the need and high potential for reviving the poultry sector in Macedonia however having in mind that the capacity of the Macedonian farmers of negotiating and organizing into a system that with complete value chain is inexistent.

The main driver in the initial stage have been donors, i.e. the activity taken by Care and USAID, and the integrator Gica as the main driver of all of the activities which after the finishing of the project provides sustainability of the chain

The main motivation of the implementers was to assist Macedonia's transition from a traditional socialist production model by training and supporting the participants in modern standards, hygiene, and record keeping and by raising the awareness for demonstrating market oriented farm management

5 EPI Centar International, Skopje, is a spin-off from Care Macedonia which implemented the BID project and implements the REGS project in Macedonia

and organizing into a full functioning supply chain system with more segments for a final outcome raised household income and local economic development by increasing the employment.

Motivation for other stakeholders in the value chain was the financial benefits and economic sustainability of the project activities and financial benefits for the direct stakeholders involved in the system and realization of future income opportunities. The farmers received assistance in standardization of the production, organized sales and BDS.

4 Innovation in terms of production, processing, collective action and enabling environment

- Established a new approach of integrated value chain with direct link between the processor and the farmer without association or cooperative as a mediator but a collective action.
- Established value chain systems with reduced investment size compared to vertically integrated organizations covering all aspects of the supply chain through outsourcing separate activities (day old chicken, fattening, and slaughtering) while keeping the feed as part of the integrator's activities as it contributes 80% of the total production costs of production and keeping the veterinary services to ensure control and monitoring for standardized production and quality.
- This organization of the value chain promotes the revival of the cooperative form of business since it improves the development and growth of the individual farmers.
- The experience showed that the direct cooperation among the farmers and the processors results in better achievements and sustainability of agriculture. At the initial stage of implementation the farmers did not need to be part of a cooperative or association. However, in the later stages the farmers organization will have the role of a union which will represent the farmers at the integrator to ensure that all of their rights and contract conditions are fulfilled.

- The projects provided enough opportunities for local development and regional cooperation through the bottom up approach. The significance lies in the direct support to the farmers for implementation of the project activities and capacity building. The considerable support to the farmers has been achieved though assistance for access to market, market linkages, access to services and levering the negotiation levels of the farmers.

5 Plan and achievement, including unmet objectives and unplanned achievements, main beneficiaries

The final aim of all the engagements in the sector was enabling employment in the rural areas of Macedonia and result with higher local economic development in the region of western Macedonia;

Replication of the model will enable local economic growth in Kosovo's rural areas as well as interregional cooperation and opportunities for further interregional trade based on the fact that the model is functional and financially beneficial for the Macedonian case.

The bottom up approach which concentrated on the support of the farmers and their embracement of the activities are considered as the main beneficiaries of the activities and main achievement with direct positive implications on the rural development – local development. The farmers were given complete support in the process of establishment of their farms and the production process, while veterinary services were integrated in the system.

What the BID project did not assist, what however would be beneficial, is to outsource the production of the day old chicks as well. One of the farmers with best results could be selected and instead of broiler production he can produce day old chicks for the integrator. This was not foreseen with the project activities, and it would be another step towards better organized system.

In both cases the main beneficiaries of the project activities are first of all the primary producers, i.e. the farmers. The integrators indirectly have high financial benefits and consequently the region.

6 Critical success factors

Based on the project activities and the research on the sector the key success factors for a fresh broiler meat production in Macedonia are:

- Organized and well managed modern value chain of the broiler meat production by the integrator with capacity due to insufficient market knowledge and organisation and quality assurance.
- A new market entrant as an integrator for competition integrator will be crucial.
- Modernisation of the slaughterhouses, continued practicing of HACCP and ISO standards is a must for increase of the production and possible export.
- Packaging, labelling and distribution continued to be well organized with well developed logistics by the integrator. Further spreading of the distribution network.
- Collaboration among the farmers and powerful association in the later stage is imported to represent the rights of the farmers at the integrators.

7 Biggest surprise

A significant part of the farmers during the length of the project have doubled the farm area for production with own investments, and a significant part of the individuals are still part of the integrated business model even after two years, providing income for their families.

8 When and why the initiative could have collapsed, but did not, and why not?

The initiative for reviving the broiler sector in Macedonia was initiated and supported by a donor project – Care International Macedonia with the BID project implemented in 2004 in Macedonia. The initiative was put in place in order to create a completely organized value chain in this area with special focus of supporting the individual farmers and benefiting from the integrated supply chain for local economic growth. The outcomes showed that the project is sustainable and increases economic activity in the rural areas.

At the time of initiation of the project both major market players, Pilko and Gica, had envisioned their respective role in the chain so that Pilko as a slaughterhouse will package and market the products under own brands. The other player however also marketed own brand which caused unfair competition. The brands went well on the market but the competitors eventually created own separate supply chains and brands which were launched on the market.

9 Concept and methodology explicitly or implicitly being used

- The main aim of the projects was assistance in organizing fully functioning supply chain for fresh broilers in Macedonia to ensure sustainability by using the existent non operational facilities by directly involving the primary producers to increase the employment level, while ensuring that there is financial benefit for both parties.
- Direct support to the producers though participation in the investment of the production facility ensured the sense of ownership and higher motivation for strengthening their role in the system to be able to invest in expansion of their facilities.
- The input supplies (feed, day old chicks) are provided by the integrator, the fattening by the farmer which hand them over to the integrator who than takes care of the slaughtering, packaging and distribution of the

product. The farmer received adequate compensation for the fixed costs of production, the labor and part of the profit margin.

- The financial benefits for all of the parties ensured sustainable and sure system with guaranteed sales and income for the farmer and enabled the integrator to plan its production according to the consumer demand.
- Direct cooperation between the integrator and the producers ensured higher efficiency, financial gains, better communication and regional concentration of the farms which than cause experience and knowledge spill over among the farmers and for the integrator better monitoring and control as well as lower logistics control.
- The farmers in the system were carefully selected with main household income from agricultural activities, the farm had to be located near the living place for better control, the farmer had to have enough capacity to learn about the modern processes for broiler production, the farm had to have the capacity to expand, and the farmer had to have experience in growing poultry. These prerequisites made sure the farmers are devoted to continue the cooperation with the integrator since the system was dependant both on the integrator and the farmers.
- The final outcome of the approach was to ensure local economic growth through increased opportunities for the rural areas and increase the household income.
- Once the farmers were supported and successfully led into a fully functioning operating system (from the input to the sales) the system can be sustainable and further directed by a large enough integrator with capacity and skills to coordinate, manage and control the value chain.
- The location of the farmers in one region will make sure that the first farms which provide a word of mouth effect and involve other potential farmers to join the system

10 Relative importance of market and market failure, government and government failure, network and network failure

As already stated, the Macedonian market supply of fresh broiler products is low. This fact indicates that the supply can be significantly increased and still to be financially viable since it responds only to 5% of the total demand. Having in mind that there are solely two players on the Macedonian market there is a place for increased competition in order to raise the standards of the industry and to introduce other products with higher value added.

On the other hand the farmers as primary producers are relatively dependant on the integrators i.e. enterprise which already supplies the inputs, organized the processing and/or sales failure of such network might cause the failure or the system. This is potential risk as long as the farmers are not organized into an organization, and thus the negotiating and lobbying power of the farmers is low. In this respect the farmers need an entity/organization that will make sure that that the rights of the farmers are ensured by the integrators.

The lessons learnt from the Macedonian case are that as long as the linkages are direct the efficiency and effectiveness of the system is higher, the communication is better and the financial gains are higher for both parties. The outsourcing of the non-primary activities of the integrator ensures higher control, specialization and lowers the dependability of the chain on one linkage, i.e. in this case the fattening of broilers have been outsourced. However further development should provide that the day old chicken should also be outsourced, and the slaughtering services as well. It is crucial for the integrator to keep the feed production (amounting to up to 80% of the costs), to provide the veterinary services for control and quality management and to organize the distribution and sales of the product.

The direct government support of the broiler industry is non existent so far. The government however if involved in the meat regulation should assist the sector by strengthening the control of imports with “unknown origin”.

Also, with governmental should assist through further development of the meat industry by regulating the traceability issues of the meat production. With the decentralization process the LED support is in the lands oft eh newly formed LED offices in the municipalities which may assist the SMEs in their business activities in the areas where the municipality has the authority.

Upgrading Milk Production in Monte Plata and Bayaguana, Dominican Republic

Ulrich Harmes-Liedtke, Carmen Langner, Ángel N. Matos Audén, Dirk Schulze

1 Brief description of the case

Bayaguana is one of five municipalities that make up the province of Monte Plata, known as the milk basin of the Dominican Republic. The area produces 100,000 litres of milk daily, which represents 85% of the national production.

The initiative designed to strengthen the milk sector began in mid 2003 within the framework of one of the first Local Economic Development programmes in the country, promoted by the German Development Corporation (GTZ). The Programme of Decentralization and Local Development (PRODEL) continued until mid 2005. Once the programme had ended, Local Development Agencies (ADELMOPLA) took over the accompaniment process.

2 Brief timeline of activities

- Creation of the Monte Plata Local Economic Development Agency (prior to the initiative).
- Exercise with the PACA methodology (Participatory Appraisal of Competitive Advantages) in which the milk sector was identified as one of the lines of action (July 2003).
- Application of proposals for increasing productivity and product diversification on 7 pilot farms.

- Creation of a collection centre and purchase of a refrigerated truck for transporting milk.
- Diffusion of the practices to the majority of small farms in the area.

3 Activity promoters, main initial motivation or initial problem, other relevant actors

The diagnostic process revealed that the farmers were divided into two segments each with a different approach to developing the sector. The first group, made up of medium and large farmers grouped together into the Monte Plata Farmers Association (AGAMPTA), were primarily concerned with industrializing the production of milk and milk derivatives. They were seeking financial resources to set up a milk processing plant, through which they could extend the productive chain. The second group, comprising small milk producers who were members of the Bayaguana Milk Producers Association, were mainly interested in training and technical assistance to solve certain concrete production problems they were facing.

In addition to the producers who participated in the process, the most important actors that led the activities carried out in the area were the Monte Plata Local Economic Development Agency (ADELMOPLA), which assumed joint responsibility with the company Megaleche for coordinating the training of producers, the Bayaguana and Monte Plata Milk Producers Association, which became actively integrated into the process, and AGAMPTA, which also joined the process at one particular point to assist with the transportation of milk to the processing plant.

4 Innovations in terms of production, processes, collective action and creating a favourable environment

The innovations were mainly concerned with increasing productivity and commercialization particularly in the sector of small milk producers.

It was important to launch initiatives with a number of pioneering farmers who were willing to experience the necessary changes on their own farms and invest their own resources. The positive results obtained by these pioneers facilitated the diffusion of the experience among other farmers.

The existing institutionalization in the sector was a necessary condition for collective action. The existence of two associations formed on the basis of the size of producers made it easier to focus activities according to the particular interests of each segment.

5 Planning and achievements

The initiative concentrated its activities on the sector of small producers, where it achieved a significant improvement in terms of productivity and diversification in sales.

The monitoring process looked at the example of the farm belonging to Mr Elías Polanco in the municipality of Bayaguana. The farm covers an area of 250 tareas (16 tareas = 1 hectare), and has 50 head of low yield cattle, 38 of which are milked, and this task is carried out by hand. In order to increase the productivity of the cattle a new fermentation formula was applied, which reduced the costs of raw materials by nearly 90%. A trough was constructed for ensilage and fermentation, thereby solving the problem of feeding the cattle in the dry season. The pilot farm was divided into pastures, in order to make optimum use of the fodder. In response to these changes, milk production increased by 20%. Following this pilot application, the experience was disseminated to 128 farmers and their personnel during 8 educational training days.

In order to reduce their dependence on large buyers the farmers began direct commercialization. They now sell part of their boiled daily milk production directly from a small shop they themselves own, which happens to be strategically located on the route taken by the tourist safaris visiting the area. This has resulted in a 40% increase in income for each litre of milk. Direct

sales continue to increase and constitute a significant contribution to the incomes of the small producers.

In addition, they are making cheese, yogurt and caramelized milk, which are also sold directly. Sales of these products have remained stable, with profits exceeding those earned from the sale of milk, at over 50%, which means that it is likely that both supply and demand will persist, since there is currently a high demand for processed products and prices are increasing.

The initiative has strengthened cooperation between dairy farmers in two ways. On the one hand, through their association, the small farmers have set up a milk collection centre. On the other hand, they have a cooperation agreement with AGAMPTA to provide transport to processing plants in Santo Domingo. AGAMPTA makes use of a refrigerated truck for transporting milk from the collection centre to the pasteurizing plant in Santo Domingo. This collaboration may form the basis for even closer cooperation, once AGAMPTA has its own processing plant, as is currently planned.

With regard to job increases, one of the farm owners who took part in the pilot project hired two additional workers, one for cheese production and the other for general farm management. It would be unrealistic to apply this figure to all the producers that participated in the initiative, but it can be assumed that some of them have also hired extra workers, like the Monte Plata producer Raimundo Roy, who created 30 new jobs.

6 Critical success factors

- Working with segments of businessmen: Instead of trying to align the diverse interests of the farmers from AGAMPTA and the Bayaguana Milk Producers Association, it was believed that the best way to successfully implement the proposals was to work on two fronts. In this way, the segmentation made it possible to address the concrete needs of each group of farmers, who shared clearer objectives and showed a greater level of commitment. It should be emphasized that in spite of

this procedure, the intention still exists to link the two groups of farmers when the time is right.

- Response to a concrete concern: It was possible to achieve a widespread mobilization because the PACA proposals provided a concrete response to the primary concerns preoccupying the milk sector at the time. The farmers were seeking alternatives for feeding their animals during the dry season, since their dependence on imported feed had led various farms to go bust due to the instability of the exchange rate that caused increases in the cost of feed. The farmers could expect to see short term visible benefits from the PACA proposals. This meant that they could be easily mobilized and received the suggested modifications very positively. Visits to demonstration farms contributed to this mobilization process, as they provided an opportunity for producers to exchange experiences.

- Businessmen willing to invest: For the above-mentioned reasons, seven owners offered the use of their farms and resources for the pilot project designed to produce fermented liquid feed. They invested in troughs for ensilage and fermentation with sufficient capacity to provide two months' feed for around 30 head of cattle.

- Concrete technical improvements: It was an advantage that the producers' problems could be solved by a concrete technological innovation that was both relatively easy to apply and moderately priced. This made it easier to find producers for the pilot application, providing rapid, tangible benefits and motivating more farmers to replicate the experience.

- The lack of competitive pressure aided the exchange: The guaranteed demand for the entire milk production of Bayaguana took the competitive pressure off the farmers with regard to the commercialization of their product, thereby increasing their willingness to cooperate and share the knowledge acquired during the pilot application of fermented liquid feed. Whatever quantities the farmers were able to produce were absorbed by the big milk processors like Rica, Parmalat and Nestlé. Sharing knowledge about increasing milk production and reducing costs never endangered the individuals' own product sales.

- Rapid, tangible results: Although the implementation of the PACA proposal ended after a few months, the good results obtained motivated the farmers to continue with collective action oriented towards addressing current needs. Thus, the Association has set up a collection centre in Bayaguana, which is now also beginning to produce fermented liquid feed for sale to those farmers who have not invested in producing their own feed of this type but who also need to find a more economical alternative to imported feed during the dry season. It is important to note that visits are still being made by other farmers to the pilot farm producing fermented feed, for the purpose of exchanging information not only on this experience but also on topics related to animal management, etc. To date 52 farms are applying this method.

7 Biggest surprises

- The competitive diagnostic revealed differing interests among farmers according to the size of their establishments. Whilst the medium and large farmers were primarily concerned with industrializing production of milk and milk derivatives, the small producers focused their demand on training and technical assistance for improving productivity.

- Revival of ADELMOPLA: Although it took time for ADELMOPLA to be revived and become involved in the process, once it was brought on board thanks to the mobilization of the actors in the sector, it took on an important role in the coordination of training producers in conjunction with Megaleche and in the diffusion of the experiences through exchange visits to model farms. The initiative assisted with the revival of the agency. Another element that worked in its favour was the fact that the technical manager of the agency had agronomic training, which gave him greater access to producers and increased his credibility. After the LED component completed its implementation of the PACA initiative, ADELMOPLA took over its functions and is still continuing its work of coordinating training for the milk sector, particularly on questions related to quality and cattle management.

- Guaranteed demand for the entire local milk production took the competitive pressure off small farmers with regard to their sales to large buyers. This encouraged some farmers to experiment with opening up new commercialization channels. At the same time, the lack of collective pressure limited the amount of energy others dedicated to change, since many producers were content with the increase in productivity and were not motivated to seek new forms of processing and commercialization. There was little interest shown in cooperating with other sectors of the local economy, for example along ecotourism lines.

8 When and why might the initiative have collapsed, and why didn't it collapse?

Clearly there were factors that prevented the proposal put forward by AGAMPTA to set up a milk processing plant from being rapidly implemented, since the plant has still not been acquired and the farmers from AGAMPTA continue to debate the possibilities of obtaining financial assistance. In order to learn from this experience it is important to look more closely at the two main reasons for this failure to implement the plan. Firstly, the process has certainly been held back by the need to secure external funding in order to acquire the plant, which is something that cannot be directly influenced by local actors, and may have discouraged the farmers as a result. This is why one of the criteria for selecting PACA proposals or LED initiatives is the feasibility of putting them into practice using local resources. However, in this particular case it would appear that the main reason why the plant had not been acquired was the lack of genuine interest on the part of the farmers, which in turn was due to the lack of competitive pressure in the sector that might have forced them to innovate and seize new business opportunities. The farmers of AGAMPTA had (and still have) the sale of their milk guaranteed, as do the small farmers from the Bayaguana Association. Given the larger size of their farms, the income generated by the sale of fresh milk provided them with a comfortable living. Consequently, there was not sufficient incentive for them to take the financial risk of investing in the plant.

9 Concepts and methodologies applied explicitly and implicitly

- The initiative began with the application of the PACA methodology, that is to say, a participative diagnostic of the local economy. Although the implementation of the PACA proposal ended after a few months, the good results obtained motivated the farmers to continue with collective action oriented towards addressing current needs. Thus, the Association has set up a collection centre in Bayaguana, which is now also beginning to produce fermented liquid feed for sale to those farmers who have not invested in producing their own feed of this type but who also need to find a more economical alternative to imported feed during the dry season. It is important to note that visits are still being made by other farmers to the pilot farm producing fermented feed, for the purpose of exchanging information not only on this experience but also on topics related to animal management, etc. To date 52 farms are applying this method.

- The institutionalization of local economic development in the form of the agency ADELMOPLA was important for ensuring continuity of support for the sector. At the same time, by facilitating associative processes the agency managed to energize the concrete tasks of the milk sector, thanks to a clear line of work that still continues today.

- The input of the LED component of the Project from the GTZ consisted in this case of monitoring the implementation of the initiative as well as supplying specific inputs. Here we should mention the provision of the services of an expert in the production of cattle feed, who carried out the diagnostic on the pilot farms, developed the technology, trained the producers and documented the results so that they could be replicated. These contributions were made with the support of ADELMOPLA, which mainly coordinated the training and exchange visits to the farms. Once the accompaniment by the LED component had ended, ADELMOPLA continued the work being done with the milk producers.

10 Relative importance of markets, government and networks

Guaranteed demand for the entire milk production of Bayaguana took the competitive pressure off farmers with regard to the commercialization of the product, thereby encouraging a willingness to cooperate and share the knowledge acquired during the pilot application of fermented liquid feed. Whatever quantities the farmers were able to produce were absorbed by the big milk processors, such as Rica, Parmalat and Nestlé. Sharing knowledge about increasing milk production and reducing costs never endangered the individuals' own product sales.

Lack of competitive pressure due to guaranteed demand for milk production has on the other hand prevented the development of innovations and discouraged farmers from seizing any new business opportunities that presented themselves. The farmers from the Bayaguana Association have committed themselves to supplying a fixed quota of fresh milk daily to the processing plant via their collection centre, which accounts for almost their entire production. This commitment is due on the one hand to a sense of responsibility for making the Association's collection centre work, but also on the other hand to the stable, guaranteed sales which the collection centre gives them and which they do not wish to risk. If this commitment did not exist, several small producers would destine perhaps their entire milk production for direct processing and sale, since it provides them with a higher income. The challenge, therefore, is to gradually increase milk production, by increasing productivity per cow using additional measures on the one hand, and investing in increasing the number of head of cattle on the other.

Upgrading the Soy Value Chain in Los Ríos, Ecuador

Harald Landauer

1 Brief description of the case, including country, locality, duration

The province of Los Ríos, situated in the coastal region of Ecuador, produces 95% of the soy grown in the country. Along with corn, soy is one of the most important crops in this highly agricultural province, giving it considerable economic and social significance. There are 67,000 hectares of production and over 4,000 producers, mostly small farmers. Only 10% of producers belong to associations. As is the case in many agricultural regions, there is a high incidence of poverty, which affects a high percentage of the population of the province.

The case described – which took place between 2002 and 2005 – demonstrates how two initiatives designed to improve the competitiveness of the productive chain of soy – animal feed – poultry industry in Ecuador influenced the local area and made it possible to mobilize actors and bring about greater integration of the chain. One of the initiatives originated at the national level, it was dominated by the final links in the chain (extraction industry, poultry industry) and was promoted by a Chain Consultative Council. The second, a grassroots, local economic development initiative, succeeded in involving producers of raw material and in mobilizing contributions for correcting weaknesses in that part of the chain and was promoted by the Provincial Government.

Each of the initiatives was supported by a specialist organization at the meso level. In the case of the Provincial Government this was the Union of Provincial Councils of Ecuador –CONCOPE, which encouraged its members to adopt a new role as promoters of economic development and transferred technological capabilities (PACA). The Consultative Council, which

promoted the nationally-based initiative, in turn entrusted the Corporation for the Promotion of Exports – CORPEI with the task of carrying out a competitiveness study for soy and activities related to consultancy work and facilitation of the chain.

The synergy between the two initiatives can be clearly observed in the joint work carried out by the Provincial Government and CORPEI (at the request of the Consultative Council), which resulted in the new "commercialization mechanism for absorbing the soy harvest" that was presented to industrialists and producers. The mechanism was well received by a large number of companies and producers. At this point it was possible to glimpse a clear win-win situation for various links in the chain, given that the competitiveness of the soy agro-food chain depends on the availability of the production of small producers.

2 Brief timeline of activities – important events, crucial or determinant points, rupture, crisis

- In 2001 the Consultative Council of the Soy Agro-food Chain, the 'National Soy Council' is founded, in the framework of SICA Project overseen by the World Bank and the Ministry of Agriculture.
- At the heart of this public-private corporation a financial trust is set up through a temporary mechanism financed by a special tax on imports of soy paste.
- In May 2003 the trust commissions CORPEI (the Ecuadorian Export Promotion Agency) to conduct a study on the competitiveness of soy. The study takes 7 months to complete. A benchmarking mission is also made to Paraguay with actors in the chain.
- During 2003 the Provincial Government of Los Ríos (PGLR) develops a Strategic Agricultural Plan, which is widely participative and approved by the provincial actors. Nonetheless, the long development process results in some disillusionment with the actors and it is not clear where the work should begin.

- At the end of 2003, in order to motivate the actors to finish the documentation for the Plan, the PGLR launches a competitiveness agenda for Los Ríos designed to improve the performance of the productive sectors in the province. In this context, the intention is to strengthen and accelerate the process and come up with proposals and actions. The corn and soy sectors are pre-selected owing to their important role in the provincial agricultural economy.

- On January 20, 2004, the provincial prefect launches the PACA Project as a "provincial initiative for the competitiveness of the soy and corn productive chain". With the help of allied institutions like CORPEI, INIAP, universities and the production unions, the participative diagnostic is carried out within three weeks in half of the cantons with the highest production levels.

- In May a "Soy Forum" is organized with representatives of the soy extraction industries, in conjunction with CORPEI. There are around 400 participants, most of them producers. A reference price for soy is presented, with the aim of benefiting both producers and manufacturers. A large number of producers sign up to this absorption mechanism for the 2004 harvest.

- The most visible action in the short term is the soy meeting in May 2004, at which industrialists – the principal buyers of soy in the province – and producers are presented with a new plan for the commercialization of the 2004 harvest, based on a mechanism where both parties can win.

- The endeavour is undermined a few months later when a union of large producers intervenes and succeeds in getting the Ministry of Agriculture to repeal the mechanism.

- However, by early 2005 ten of the actions proposed for improving aspects of productivity and associativity, technology transfer and training have already been implemented and there are plans to continue negotiations between producers and manufacturers. Other bottlenecks to more equitable commercialization, such as the lack of a register for the thou-

sands of producers and their organizational weakness, are beginning to be addressed.

3 Activity promoters, main initial motivation or initial problem, other relevant actors

The activity promoters were the Provincial Government of Los Ríos, the Trust of the Soy Consultative Council and CORPEI, acting on the Council's orders. Other actors relevant to the implementation of promotion, training and technology transfer activities were the National Institute for Agricultural Research, the universities and production unions in the province.

The complete lack of coordination between the production and processing sectors puts the soy producing sector at serious risk of collapse, with the consequent risk of social conflict in the short term and the unavailability of the raw material at the local level in the medium term. In turn, this would result in a processing sector that is highly vulnerable to distortions in the international market, and would also seriously affect the process of crop rotation (corn-soy, rice-soy) which is extremely beneficial to soil fertility in Los Ríos.

Their low level of integration in the soy chain results in market instability for small producers, leading to loss of harvests and highly fluctuating prices. Their low productivity means that the price of raw materials for the processing industry is high, since their production processes are costly and unproductive. This results in the low competitiveness of the chain as a whole, from the extraction industry, through the animal feed industry to the poultry industry (production of chicken and eggs). The principal motivation of the animal feed industry has been to guarantee raw materials and form alliances with other actors so as to be able to react to the competitiveness of competitor countries. The principal motivation of the Provincial Government and political leaders, on the other hand, has been to improve the agricultural productivity of the province and guarantee a market for its agricultural products.

4 Innovations in terms of production, processes, collective action and creating a favourable environment

There were important innovations relating to collective activity and associativity*:* In order to succeed, the national chain initiative and the strategic recommendations put forward by CORPEI needed an actor with access to the fragmented and disorganized small producers, particularly as the diagnostic had also revealed that the producers did not see the use of forming organizations.

This ally turned out to be the Provincial Government, which was a recognized actor, and had a political leader (the elected prefect), a medium agricultural entrepreneur and a consultant rice producer all committed to advancing Provincial Economic Development.

However, the team lacked tools and what is known as 'entrepreneurial spirit'. The Department for Rural Development had been working for years on trying to organize small producers and had contacts with all the leaders and groups, but the 'organization as an end in itself' approach had not borne fruit.

A team of young technicians was rapidly put together from the Planning Department, the institution's vanguard, and a participative method was introduced, incorporating elements of market analysis, competitiveness and a business approach, which would enable them to give producers a message based on competitiveness and markets. After receiving training in methods of conducting workshops and interviews using competitiveness analysis formats, they took on the challenge of developing the diagnostic and implementing each of the recommendations and action proposals. With the attention given by the authorities to the new initiative, the institution's new spirit gained a place for itself and won supporters. Through the workshops, it was possible to mobilize 150 producers, agricultural centres and cooperatives. The end result was the creation of a more favourable context for coordination between producers and manufacturers.

5 Planning and achievements, including objectives not reached and unplanned achievements, principal beneficiaries

The Provincial Government of Los Ríos undertook a series of activities in the field of Local Economic Development, such as the identification of strategies in the "Strategic Agricultural Plan" and the "Provincial Competitiveness Agenda for the Reactivation of the Agricultural Sector". The planning process took one year to complete and was a huge endeavour involving experts, support institutions, technicians and public officials. However, it lacked guidelines regarding where to begin or what to prioritize. They also produced an excellent diagnostic with a competitiveness strategy for the most important chain in the province, soy-animal feed. As part of this chain, the soy and animal feed processing companies had been consulted and some had participated, but the producers were only invited to listen to the results and did not feel a part of the process. They therefore remained sceptical to the proposals. Also lacking was a committed team of provincial actors with backing from the authorities. Things then began to move forward after an action-oriented participative diagnostic (PACA) was applied to the soy and corn chains. The intention was to produce tangible results for the beneficiaries of the promotion policies: producers, companies and service providers, within a short timeframe. The diagnostic took three weeks to complete, before the conclusions and action proposals could be presented. The inter-institutional team identified the main strengths and weaknesses of the various elements in the productive chain (suppliers and services, agricultural production, commercialization and support institutions), on the basis of which it put together a series of activities to be carried out in the short term by a variety of provincial actors.

The main achievements at the end of 2004:

- Strengthening of the relations between the PGLR and other institutions like CORPEI and INIAP and rebuilding of trust between private and public sector institutions.
- Networking gradually increased, thanks partly to certain PACA initiatives such as round tables, workshops etc, giving producers more opportunities to interact.

- Action oriented towards improving productivity, by disseminating topics like the use of certified seeds and the reorganization of training for producers.
- The most important agreement was produced at the negotiation table and presented at the Soy Forum. A reference price was set for soy, with the intention of benefiting and protecting producers and manufacturers alike. The leader of one of the producers associations declared such an agreement to be positive, since it created confidence in a traditionally unstable agricultural market. The number of hectares of soy sown increased that year thanks to the agreement.

The aim of the Provincial Government is to become a reliable partner and a source of information/support for local producers, as well as a bridge between the different members of the soy value chain.

6 Critical success factors

- Institutional stability: The prefect was standing for re-election for the third time and had additional incentives for observing agreements and demonstrating concrete results.
- The existence of specialist organizations at the meso level: The Corporation for Promotion of Exports (CORPEI) which works with instruments for chain and competitiveness analysis, and the Union Of Provincial Councils of Ecuador (CONCOPE), which developed its members new role as promoters of economic development and provided training in the PACA methodology (with support from the GTZ and CIM). The concrete result of these activities was the transfer of capabilities and knowledge.
- Leadership: A key role was played by more innovative, visionary and entrepreneurial leaders, in both government authorities and private sector associations.

- Sustainability of the process: Many of the activities have been a response to the new role of the intermediate levels of government as promoters of economic development and it can be hoped that the new approach to local policy will be maintained, regardless of any political changes in public offices.

7 Biggest surprises

- The collaboration between the Provincial Government and the Corporation for Promotion of Exports on the preparation and implementation of activities related to local economic development and the most important agro-industrial chain in the province was without precedent in Ecuador
- The rapid participative diagnostic (three weeks) and the competitiveness study (several months) agreed on the main strengths and weaknesses of the various aspects of the productive chain (suppliers and services, agricultural production, commercialization and support institutions). Where they differed was in the way they were carried out and in the number of participants, which was much higher in the case of the diagnostic. They complemented each other because whilst the first was oriented at finding short term activities to create opportunities for integrating the actors in the chain (oriented at building social capital), the second oriented the actors in the strategic objectives to be followed (more oriented towards the strategy).

8 When and why might the initiative have collapsed, and why didn't it collapse?

The level of associativity is very low and producers prefer not to participate in sectoral organizations due to their lack of credibility. Reasons for this reluctance include a history of bad experiences with cooperatives in Ecuador and corrupt leaderships that still discourage people from joining associations. This lack of organization means that small and medium producers

have no negotiating power in the market and basically depend on the decisions taken by big agro businesses.

In the soy value chain in Los Ríos it was found that the big producers had absolutely no incentive to participate in any type of collective action, unless it was of particular interest to them and of short-term duration. On the other hand, they tended to block any initiative that might affect their particular interests.

The idea behind the new mechanism of commercialization for soy was for producers to sell directly to manufacturers, doing away with the old practice of selling through certain associations dominated by a few big producers. This situation directly threatened the incomes of the intermediaries, since they no longer received a commission for providing a bridge between producers and industry, and eventually an association of a few big producers, which act as intermediaries in soy commerce, put direct pressure on the Minister of Agriculture to decree that the old practice should be maintained.

Nevertheless, the adaptation and the strengthening of the role of the PGLR as a promoter of provincial economic development and the learning it provided meant that the eleven activities were able to be implemented and that work continues to be done on facilitating negotiations between the actors in the links of the chain. This role as facilitator of the chain was handed over symbolically to the PGLR by CORPEI, which finished the task assigned to it by the Trust once its funding had run out.

9 Concepts and methodologies applied explicitly and implicitly

- The application of the *concept of value chains* involved making the actors in agro-industrial chain understand that the well-being of one of its links depends in large part on the well-being of the rest. This eventually brought about a shift from the traditional confrontation between farmers and industry to a more favourable context for cooperation.

- This case demonstrates the application of concepts of *public-private associativity* in value chains and instruments for analyzing and promoting

them. The Consultative Councils proved to be a positive model in some chains, achieving interesting results, as in the case of the creation of a common Trust that succeeded in agreeing measures for improving joint competitiveness (*collective action*). The sequential methodology of the diagnostic, policy proposals and implementation are however limited when there is a high level of fragmentation among actors in the chain.

- This approach is complemented by the application of a participative planning methodology (PACA), which also uses tools for analyzing the competitiveness of clusters or chains. PACA's strength lies in the its capacity to combine analysis of the competitiveness of territories and/or chains with close attention to those elements that generate trust between actors, thereby encouraging the participation of the most important local actors in the analysis and subsequent implementation of proposals.

- Many of the activities are a response to the new role of intermediate level governments as promoters of economic development within the context of state decentralization. This context guarantees the sustainability of local economic development processes regardless of political changes in public offices.

10 Relative importance of markets, government and networks, and the corresponding shortcomings of each regulatory mechanism

The case in point demonstrates the problem of market failures due to asymmetry of information and power in a non-linked productive chain. The soy - animal feed - poultry industry chain is a highly difficult chain in the agricultural sector for the following reasons:

- Low number of extraction industries (4 - 6).
- Competition with a highly distorted international market.
- Dependence of the domestic price of grain on the price of soy paste.
- Few large buyers of soy paste.

Faced with such a complex situation, regularization via government could provide the solution. The Consultative Councils of the chain are coordinated by the Ministry of Agriculture, which might also intervene to regulate imports of soy paste, a raw material for the animal feed industry. A clear example of its shortcomings can be seen in the case of the eight big and medium soy producers, grouped together into one organization, who objected to the direct method for absorption of the harvest of hundreds of producers by industry and, by exerting direct influence at the highest levels in the Ministry of Agriculture itself, succeeded in getting the mechanism annulled.

Regulation via networks is the method being implemented by the Provincial Council initiative. In its role as facilitator, it attempts to establish networks and create opportunities for joint work by institutions. The other example of networking is provided by the Consultative Council of the chain, overseen by officials of the Project run by SICA /the World Bank and/or the Ministry of Agriculture. In both cases the networks function as long as the facilitator is accepted by other parties and can settle disputes between powerful players. In the case of the Consultative Council on Soy, the network failed when one group in the chain disregarded the established rules.

Upgrading Mango Production in Lambayeque, Peru

Yris Milagros Siesquien Chambergo

1 Brief description of the case, including country, locality and duration

The production of mangos for export began in the Motupe Valley in the 1970s, with the Haden variety and a few plantations of the Kent variety on an orchard-garden scale. In the 1990s the first commercial crops were planted with the Kent variety.

In 1990, the local NGO CICAP carried out a strategic analysis that addressed areas and orientation of work. Since one of the key factors identified was the presence of modern agro-industrial companies in the northern region (agricultural export), business competitiveness was singled out as the core development strategy. For this reason, CICAP decided to work on promoting business competitiveness through projects designed to develop the technical, productive and business level of small fruit producers. The zone of intervention chosen was the Motupe-Olmos Valley, situated in the province of Lambayeque, in the Motupe-Olmos microregion.

Within the framework of the project entitled ***"Strengthening of the Productive Specialization of Small Mango Producers for Specialist Markets"*** work is being done in the coastal valleys of the northern region with a total of 240 small mango producers organized into seven associations and one central association called CETROMAN. The work is benefiting 672 families by generating dynamism in this activity during the three months of the harvest, with regard to transport and labour for mango production representing 16% of the total production for the country.

The market was formerly worth 1 million dollars, with production totalling 9 tonnes of mangos per hectare. Only 40% of this production was exported

and the other 60% went to the national market. The new dynamism now moves around 3 million dollars, with increased yields of between 14 tonnes and 15 tonnes of mango per hectare. Up to 80% of the Motupe Valley's mango production is now destined for export, while 20% goes to the local and national market.

Only producers that have transport can sell fruit to the company 'Jugos del Norte S.A.' as raw material for agro-industry, as the company only buys the product delivered to its factory.

2 Brief timeline of activities – important events, crucial points, rupture, crisis

- The presence of the 'El Niño phenomenon' **(1997–1998)** causes a drastic fall in mango production in particular (90%), resulting in economic losses for producers.
- **1998-1999:** The first mango producers association is formed in the Arrozal District of Motupe.
- A group of medium producers forms the company Frutos de Motupe S.A. 'FRUMOSA' and exports 19 containers directly to France. They do not make a profit on the direct exportation but they do establish commercial relations in France.
- **1999-2000:** Following the formation of two producer associations in Arrozal and Chóchope, the medium producers of the FRUMOSA company agree to begin associative sales to the company AGROWEST, obtaining the highest price recorded during the period of intervention.
- **2000-2001:** The Chóchope Association and FRUMOSA begin a programme of direct exportation with the sale of 27 containers. Problems with international prices result in the disintegration of the Mango Producers Association from the Chóchope area.
- **2001-2002:** The Arrozal Association embark once again on joint sales and strengthen their capacity to agree conditions and sales prices. In contrast, FRUMOSA and just 5 producers from the Chóchope Associa-

tion again export 35 containers to the US and Europe. Once again they incur losses.

- **2002-2003:** Chóchope's only Producers Association begins a process of business linkage with a chain approach with the Shunshine Export SAC, Caja Rural, "Cruz de Chalpón" and CICAP.
- **2003-2004:** A group of producers from Arrozal, Motupe and Chanduví begin organic production of mango with technical assistance from CICAP, orienting their production to a growing market segment.
- **2005-2006:** The Motupe–Olmos Valley Mango Producers Associations enter into negotiations with a foreign export company, but despite backing from the Ministry of Agriculture (PROMPEX) and the favourable conditions offered, there is a lack of trust on the part of the Associations, given that in the past the Arrozal Producers Association took a gamble and as a result suffered heavy losses when the sales price was not paid as stipulated in the contract.
- **2006:** Sales to specialist markets (organic Market), with exports of 116.12 tonnes of organic mangoes; the price increases from S/ 16.00 to S /. 26.00 New Soles in the organic market.
- **2006:** 23 more producers now receive organic certification in the third inspection, carried out in July 2006.

3 Main actors

The main problem of commercializing mango in the Motupe Valley is the dominant presence of commercial intermediaries, in the form of 'acopiadores' (local buyers), local businesses and agro-industrial companies. The lack of organization on the part of producers in the 1990s and the current weakness of organizations prevent them from commercializing their products advantageously. Dependent on local buyers and informal businesses who set the prices and do not respect payment commitments, producers become discouraged and frustrated when their earning expectations are not met and their economic capitalization is limited; see Adrianos, Frumosa cases etc.

Encouraged by other successful endeavours, the small producers associations joined the FRUMOSA company. They had already seen how the company Frutos de Motupe S.A. 'FRUMOSA', formed by a group of medium producers with contacts in the international market, had exported directly to France in 1999. Also, in 2000 sales to the company AGROWEST had achieved a good price. They were thus highly motivated to go ahead with the deal with FRUMOSA, but from the 2000-2001 campaign on there was an evident lack of coordination and lack of the knowledge of the international market necessary for good negotiations with overseas companies, in addition to the fact that the interests of medium producers outweighed those of the small producers involved.

In this context, it was the Chóchope Association of small producers that risked most and suffered the greatest losses of all the Associations in the Motupe-Olmos Valley, eventually breaking apart completely following this bad experience.

Based on the experience gained through the years of work carried out by CICAP, a new process has been initiated in conjunction with the mango producer associations of the Motupe – Olmos Valley, with the implementation of the Project entitled ***"Strengthening of Productive Specialization of Small Mango Producers for Special Markets"*** financed by Cordaid**.** The aim of the project is to strengthen the productive specialization of small fruit producers and their organizations in order to improve their links to specialist markets. The work is carried out through strategic alliances or productive chains: technical advice is being provided by CICAP and the company SUNSHINE, through continuous training; materials are being supplied by MONIFRUT and APEVAM; credit is provided by the Caja de Sipan and commercialization assistance is being given by SUNSHINE EXPORT S.A.C. The result has been an increase in yield from 10 to 17 tonnes of mango per hectare as well as in increase in the quality of the fruit, which is reflected in the increase in the percentage of fruit exported per productive unit to 80 %. There has also been a slight increase in quality of life, since increased income leads to improved food and housing and also has an effect people's health.

One strategy employed to achieve the objectives set for organic production has been to strengthen the organizations, in order to develop their technical, productive and management capacities and simultaneously increase the negotiating power of their products.

4 Innovations in terms of production, processes, collective action and creation of a favourable environment

The most significant change that has been observed in the production of mango has involved a switch from cultivation of the criollo variety as part of "orchard garden" production, to the production of improved mango varieties (mainly Haden and Kent) destined for export.

The technological level of small producers is characterized by traditional practices, with rudimentary crop management, which does not include plans for irrigation, fertilization or health. Products used for phitosantitary controls as well as nutritional requirements of the crop are often applied unnecessarily or at the wrong time.

Another important step has been the transition towards organic production by a group of the valley's producers, as an alternative for diversification of the target market. The group includes the Chóchope Association, a group of producers from the Arrozal and Chanduví areas belonging to the Arrozal Association and a group from the Motupe Association.

Principal methods used to ensure an increase in productivity and an improvement in quality.

Increase in productivity: The producers applied an improved method of pruning, which not only consists of removing branches that do not benefit the plant, but also of encouraging the growth of a balanced structure that facilitates agricultural and sanitary tasks. Producers were trained in different types of pruning, depending on the needs of the plant, they are: formation, maintenance, health or cleanliness, production and renovation.

Use of organic fertilizer: Fertilization was seen as a task that not only supplies the plant with the necessary nutrients for adequate production, but also feeds the soil with micro organisms in order to promote soil life. Consequently, the intention was for small producers to carry out the task of producing and applying organic fertilizer, from the perspective of a rational use of resources, thereby creating healthy fertilization practices aimed at decreasing the use of external materials.

Use of water: Consultancy advice was sought on the implementation of water extraction and application systems based on waterwheels and pressurized irrigation equipment, as well as ring irrigation methods, in order to improve the use of water resources for fruit production.

Participative research: The aim was to identify the factors that influence optimum crop production, thus motivating producers to participate in research that enables them to solve specific technical problems affecting production and fruit quality. The research carried out was as follows: management of discharge, flowering and fruit in mango cultivation, effects of three types of pruning with applications of potassium nitrate on the uniformization of mango shoots, and fruit tree management and design of the productive unit in the sub sector of Choloque, town of Tongorrape.

Transition towards organic mango production: The incorporation of good agricultural practices for mango production increased production costs. In view of this dependence on the market, CICAP has been working with small producers on a transition plan for organic production aimed at the segment of the market in which the best prices are obtained, coordinating from the outset with commercializing companies.

Integration of young people through micro business service providers: This is an initial process started up by the institution in coordination with the three mango producer associations in the valley and is oriented towards training a group of young men and women for skilled labour that requires a higher degree of specialization: pruning and harvesting, as well as fertilizers, both for production and commercialization. The young participants have received training of two different kinds: business management of mi-

cro businesses with a business plan as the final product, and development of productive capacities and abilities for technical crop management.

Guaranteeing the quality of production: Special emphasis was given to the task of health controls, for the control of both pests like fruit flies and diseases like oidium (powdery mildew) and antracnosis. This activity was carried out in coordination with the National Agricultural Health Service SENASA, and entailed the transfer of simple technology for the ecological and mechanical control of fruit flies. Producers were trained in the construction of home-made traps that considerably reduce pest populations when installed on site in large numbers. Instruction was also given in simple but necessary tasks such as the elimination of maggoty fruit from the ground and the plant (burial or incineration), raking up fruit and tidying land as a complement to trapping.

5 Plan and achievement

Within the framework of the Project for "Strengthening the productive specialization of small mango producers from the Motupe and Olmos Valleys for specialist markets" the following results were obtained:

- Of the 2,700 hectares of mango (MOTUPE) sown only 2,080 are in full production and of this total 86.15 hectares of mango production already have organic certification. The aim is now for 152 producers with 392.14 hectares to complete the process of converting to organic land and obtaining certification by the end of 2007.
- 45% of families employing agroecological practices. This 45% comprises 220 families in the target group.
- Export sales to specific markets. Lambayeque has a total area of 2,280 hectares sown with Kent mangoes and 16,133.48 tonnes of mango have been exported, 14,346.28 tonnes from Motupe and 1,787.2 tonnes from Olmos. 116 tonnes of this volume has been produced and sold as organic mango, from the Chochope sector of the Motupe Valley, which is part of the small producers association.

- Business network implemented with Chochope. Work is being carried out through strategic alliances or productive chains. Technical advice is being provided by CICAP and the company SUNSHINE, through continuous training. Materials are being supplied by MONIFRUT and APEVAM. Credit is provided by the Caja de Sipan. Commercialization assistance is being given by SUNSHINE EXPORT S.A.C. This has led to an increase in yield from 10 to 17 tonnes of mango per hectare as well as an increase in the quality of the fruit, which is reflected in the increase in the percentage of fruit exported per productive unit to 80%.
- Chochope Association of Mango Producers as an examplary organization. One of the strategies used to achieve the objectives set for organic production has been for the Chóchope Association of Mango Producers to provide support for producers and help develop their technical productive and management capacities, simultaneously increasing the negotiating power of their products.

Main Beneficiaries: Given the spatial distribution of each valley, the population targeted by the Project is divided into three zones of intervention:

- **Motupe:** Three producers associations and one committee
- **Chochope:** One association
- **Olmos:** One association and one committee.

The main beneficiaries are the producers belonging to these associations and their families. This target population has steadily increased as new members have joined. 672 families in total have benefited from the Project.

6 Main bottlenecks

- Weak producers associations are mobilized by grievances rather than business management.
- Lack of technification and standardization amongst farmers in crop management and agricultural labour.

- Lack of trust between actors in the chain due to past experiences.
- Lack of planning in areas of production.

7 Biggest surprises

The consolidation of a strategic alliance by one small association of mango producers belonging to the Central Association made up of the 7 associations participating as part of the Project in the specialist market, with export sales of 116.12 tonnes of mango to the organic market in 2006 was certainly a surprise.

In spite of the heavy economic losses it suffered in previous campaigns, which led some producers to break away, the Chochope association of small mango producers kept going with the few members who still believed in the possibility of reaching a specialist market. The association now has 22 members and its efforts have paid off; it currently sells its entire production directly to SUNSHINE EXPORT S.A., located in Piura.

8 When and why might the initiative have collapsed, why didn't it collapse?

The main difficulty arose in the commercialization of mango due to the dominant presence of commercial intermediaries. This proved discouraging for producers, whose earnings expectations were frustrated by bad experiences during the 2000-2001, 2001-2002, and 2005-2006 campaigns.

The various mango producers associations in the Motupe and Olmos Valleys were becoming increasingly wary, but thanks to the push given by the nine small producers who stayed in the Chóchope mango producers association, a new example has been set. One of those hardest hit economically by the bad experiences of the past, the Chóchope association has gone on to reach the objective of exporting its products to the specialist market, obtaining a good price for producers and providing a better life for their families. Since it is a small group (there are now 22 members), the Chóchope association was able to integrate quickly, with a well-defined group vision.

This proposal has been well received by the producers of the Motupe and Olmos Valleys, who are already in the process of obtaining organic mango certification (153 farmers) and there are already 398 certified producers in an area of 86.15 hectares of mango.

9 Concepts and methodologies applied explicitly and implicitly

Methodology: The methodology employed in the various lines of intervention involves technical assistance, training and consultancy. A participative approach based on learning by doing and the joint efforts of participants is pursued, given that producers bring a good deal of their own knowledge and experience to the training.

The basic functions of this development-oriented approach are:

- Cognitive, oriented towards a knowledge dialogue, in which knowledge is constructed jointly.
- Social, because it always responds to the needs and interests of the target population.
- Instrumental, to the extent that participation requires that the population assume responsibility for finding solutions to its problems.
- Political, meaning that the population offers a new source of legitimization of proposals to the economic and social orders in the development processes currently taking place.

The method is mostly inductive, i.e. the activity is developed on the basis of situations and cases that are directly related to the context of the small mango producers of the Motupe Valley, with emphasis on the potentialities of local resources. Our work of developing capacities was founded on two basic assumptions: firstly, the market situation and the generation of wealth, which involved exploring and identifying opportunities that can be seized, and secondly, the acknowledgement of different ways of thinking, different

perceptions and ways of being amongst men and women, which reinforces the path of personal development.

The techniques correspond to the results being aimed at through the construction of new knowledge with small producers. Thus we have: courses, workshops, field trips, exchange of experiences.

10 Relative importance of markets, government, networks and the corresponding shortcomings of each regulatory mechanism

Markets: The production of mango in Peru is growing annually and is destined for both the internal and external market. There is a 'window of commercialization' for exporting this product (December - March), which is the period of greatest shortage in the external market and this has enabled Peru to become an important supplier for the main destination markets (USA and EU).

Just 20% of mango production is destined for the conventional market (local and national market) and the other 80% for the international market. The aim of our project is to improve quality through productive specialization for the international market and in particular for breaking into specialist markets like the organic market and fair trade market.

Since the main destination markets are the US and EU, the agro-exports are facing new market entry requirements. These include certain norms known as Good Agricultural Practices (GAP) for the US and European markets. Small producers, though equally affected by the requirements, are the sector with most limitations for incorporating GAP, on account of the investment needed for the process, particularly as compliance with these norms does not translate into higher prices for producers.

Public institutions: We should mention the vital role played by SENASA in the implementation of a National Eradication Programme, through the follow-up and evaluation of producers concerning pest control. This has ensured a positive general tendency for mango exports, that is, an annual increase in volumes exported from the valley. The opposite is occurring with volumes destined for the national market, which show a continuous fall. It is important to underline the low level of participation on the part of Local Government in this process.

The capacities developed by the producer are evident in the productive process aimed at improving the product. The knowledge transferred by the institution, and complemented by technical assistance and consultancy, has enabled producers to adopt and apply techniques for producing mango for export.

Networks: The small producers have developed a congenial attitude, in relation to both their organized participation and to their relations with the agents in the productive chain. Of particular importance are their relations with commercializing companies, which are being continually strengthened.

Work carried out between institutions has facilitated the process of linking small producers to the market. This has also meant that the proposal has been taken up by the institutions working on the issue, creating an institutional base for the sustainability of the Project. In addition, it creates an environment of improved relations with producers and their organizations for joint planning of activities and their subsequent execution and evaluation.

The cultivation of mango has become an important topic in recent years within the work of public and private institutions in the region, with a view to further developing agro-exports and improving the competitiveness of this product. In this light, coordination activities and dialogue between the different actors, of both a direct and indirect kind, have undergone positive changes; in some areas they have been strengthened and in others formerly scarce or non-existent communications processes have begun to develop.

The Guinea Pig Value Chain and the PRODECO Project, Peru

Percy Barrio de Mendoza Vichez

1 Case description

The project involves the voluntary participation of poor men and women, living in extreme poverty and affected by internal armed conflict, in the breeding and commercialization of guinea pigs with a productive chain focus. For this purpose, from July 2004, the rural inhabitants of the provinces of Andahuaylas and Chincheros in the Apurimac department of Peru began to organize themselves into "Producer Associations" with support from the municipal structures (Municipal Offices for Business Promotion – MOBP), which operate from a local economic development (LED) approach.

To date, there are twenty Producers' Associations with 705 participating members (342 women, 275 men and 64 women + 24 men affected by the violence). The Producers' Associations work together to meet the demands of the guinea pig markets (both local and regional), offering three types of products (carcass, pre-cooked and live). There is also a change agent that produces sausages made from guinea pig meat and vacuum-packed guinea pig pieces. The products are produced in accordance with the quality standards of markets with previously-identified demand. The associations sell guinea pigs weekly, fortnightly and monthly. The average sales volume reaches 3,500 guinea pigs per month. The production and marketing costs are 100% financed by the breeders. Income from the association sales is distributed among the members according to the number of guinea pigs and the type of product, once marketing costs have been deducted. Investment in infrastructures and equipment rests with the breeder members, and has grown steadily in line with the growth in each family's guinea pig popula-

tion and generation of income. The associations are formalized and inscribed in the public registers and the National Tax Administration Office.

The task of the PRODECO project is to encourage LED processes, by strengthening the new role of the municipalities, as well as the capabilities of the municipal authorities, potential local experts – PLEs[1] and the breeders associations.

2 Time Line of Activities

2003:

- Establishment and functioning of the Municipal Offices for Business Promotion (MOBP).
- Selection of MOBP promoters with the participation of the Municipalities, PRODECO and ADEA.[2]
- Identification of market opportunities and bottlenecks in the production and commercialization systems.

2004:

- Support for the formalization of Producers Organizations through prioritized chains.
- Channelling of specialized training and technical assistance services through Consultants, aimed at municipal authorities, MOBP Promoters, PLEs and organized producers.
- Training of Potential Local Experts by means of "study grants-work" designed to strengthen technological transfer to the Breeders Associations and incorporate these PLEs into the market for supplying local technical assistance, through municipal structures.

1 Persons within the sphere of the Project who are being trained to supply the private local market for technical assistance.

2 Apurimac Association for Business Development.

2005:

- Support given to the Breeders Associations to improve their business management capacities.
- Study trips to successful projects at the national level.
- Permanent channelling of market information.
- Market research on markets for guinea pigs (supply – demand).
- Local festivals and a mega Guinea Pig event, to provide encouragement and increase awareness among breeders and agents in the productive chain.

2006:

- Inter-district cooperation between breeders associations in order to meet market demands.
- Identification and appointment of "guinea pig marketing managers" at the association level.
- Accompaniment in marketing to the main client markets.
- Contact, meetings and business conferences with client businessmen.
- Support for municipalities in planning local economic development, encouraging the formation of economies of scale with business vision based on productive chains.

Critical success factors

- The participation of Local Governments, through their Municipal Offices for Business Development, in the LED process.
- The participation and competition in the market the of the association of poor families, living in conditions of extreme poverty and affected by the internal armed conflict.
- The hiring of outstanding professionals with proven experience in guinea pig breeding, marketing, extension work and productive chains;

well paid for their work, they have laid excellent foundations for the development of the chain and LED.
- Consistent efforts to work with a market approach, training, orienting and accompanying the breeders associations in the process of marketing their products.

Crisis and rupture

- Crisis with the Local Government, which did not understand the proposal due to differences between municipal authorities, eventually leading to a rupture.
- Crisis within the producers' associations, causing a split between breeders that produce for the market and those that produce for their own consumption.
- Producers that have grown technically and economically show an inclination to break away from the breeders association to work independently.

3 The initial problem

The problem that needed to be solved was the low agricultural productivity of the Family Economic Units (FEU) that are addressed by the Project and the deficient services offered by the local institutions.

The main cause of this situation is an inadequate use of agricultural technology, which prevents any increase in productivity and the quality of products. The problem is compounded by the absence of structured chains for the products of the area, and also by the poor level of institutional support for farmers and the lack of knowledge about comparative advantages for the agricultural producers in the area.

The indirect causes of the main problem include:

In production:

- Insufficient knowledge of agricultural technology on the part of the FEUs.
- Poor training in environmentally-compatible forms of new technology.

Institutional support:

- Poor organization of the FEUs.
- Scant local government presence in socio-economic development; local governments not committed to social and economic development.

Lack of knowledge about the comparative advantages of products:

- Inefficient sources of agricultural information for farmers.
- Lack of knowledge about the effective demand for products of the region.

The most significant direct effects of the main problem are:

- The low incomes of the producers – FEUs.
- The low level of participation in the market of the crops and livestock promoted by the producers, leading to a low level of agricultural employment.

The most significant indirect effects of the main problem are:

- The members of the FEUs have limited access to education.
- Lack of motivation on the part of the FEU members to stay in the area, leading to a rise in migration to the city.

Relevant actors

The principal promoters in the guinea pig productive chain include:

- The provincial and district municipalities, for their LED approach to work.

- The Municipal Offices for Business Promotion, for encouraging the development of the productive chains.
- Specialist consultants, for technological transfer aimed at producer members and for training Potential Local Experts.
- The MOBP promoter, in charge of managing the organization of families into producer associations based on productive chains, providing them with information about markets, assisting them in the process of technology transfer and accompanying the marketing processes of the producers and breeders associations.
- The Potential Local Experts (PLEs): producers in training, who answer questions on what they have learned for other breeders and, once qualified, will be providers of local training and technical assistance services.
- The Local Experts (LE): ex PLEs who have "graduated" and are in the market of technical assistance services, working either in associations or independently.
- The breeders associations: groups of breeders who come together to sell various guinea pig producers.
- The breeders: families dedicated to the technical breeding of guinea pigs with the participation of the entire family and their own investment.
- The PRODECO team: 5 professionals with the task of facilitating the realization of the project activities and objectives.

4 Innovations

Innovation in terms of production

The innovations and results shown below are the consequence of processes and dynamics that have responded to the intervention strategies (motivation, technical assistance, accompaniment, breeders' incomes…). They can be considered innovations for the majority of the users within the scope of the Project, i.e. poor rural Andean inhabitants living in extreme poverty who

had never before had the chance to experience the practices or technologies they were offered.

- *The growth and massification of the most productive guinea pig breeds*: The following table shows that higher percentages of breeders now have the Peru, Inti and Andean breeds; and that the percentage of criollo guinea pigs has decreased significantly. This can be explained by the superior yield of the first three breeds.

Table 1: Breed of Guinea Pig

	Before (2004) % breeders	Now (2007) % breeders
Peru	30	97
Inti	13	74
Andean	8	55
Criollo	75	9

- *The guinea pigs' weight increased,* achieved by changing the breed of guinea pig, the type of food and handling methods. Prior to the intervention, over a three-month period a guinea pig would reach a weight of 564g. Now, following the intervention, in a sample of 262 producers a guinea pig displays an average weight of 858g. This represents a 56% increase in the average weight of the guinea pigs.
- *Modification of the breeding locations and incorporation of equipment*: Before the intervention 91% of the producers bred their guinea pigs in their kitchens; following the intervention most of the producers now breed in large sheds (61%) and in cages (32%), and only 7 % continue to breed guinea pigs in their kitchens. In addition, those who breed in sheds have built and used equipment such as warrens, forage, food and water dispensers.
- *The increase in the number of guinea pigs bred:* Before the intervention, the breeders had an average of 27 guinea pigs per family; following the intervention they now have an average of 90 guinea pigs per family, which constitutes an increase of 236% in the guinea pig population.

Innovations in terms of marketing

- *The increase in the number of breeders linked to the market by their sales*: Before the intervention, 41% of the breeders sold their guinea pigs to intermediaries in their homes. Now, 88% of breeders sell their guinea pigs at country houses, recreation areas, restaurants and fairs as well as to intermediaries. The important thing is that the majority of the breeders are now linked to the markets and sales are now associative.
- *The increase in types of products based on guinea pig meat*: Before the intervention the breeders sold mainly live guinea pigs. Now the percentage of breeders who sell guinea pigs for reproduction, live, carcasses, pre-cooked and sausages has grown.

Table 2: Type of product

	Before (2004) % breeders	Now (2007) % breeders
Reproducer guinea pig	5	48
Live guinea pig	40	76
Guinea pig carcass	0.4	13
Pre-cooked guinea pig	0	5
Sausages	0	1

- *Reduction of time periods – sales frequency*: Before the intervention, weekly and fortnightly sales were uncommon. Following the intervention, the number of weekly and fortnightly sales has increased and triannual and biannual sales have decreased.

Table 3: Sales Frequency

	Before (2004) % breeders	Now (2007) % breeders
Weekly	0.9	1.7
Fortnightly	1.8	13.4
Monthly	35.5	55.8
Bimonthly	31.8	22.9
Triannual	21.8	5.6
Biannual	8.2	0.4

Innovations in terms of gender

- *More equitable distribution of labour according to gender in guinea pig breeding*: In the rural Andean region, guinea pig breeding has undoubtedly always been a family affair but, before the intervention, the majority of the breeding work was the responsibility of the wives. Following the intervention, the indicators have now improved in the wives' favour. The wives continue to participate, but the participation of husbands and sons is greater than it was previously. As the breeding increases and more income is earned, the activities and responsibilities are shared out more fairly.

Table 4: Participation

	Before (2004) % breeders	Now (2007) % breeders
Wife	91	92
Husband	29	81
Daughters	14	52
Sons	9	45
Mother	2	5
Father	0.4	0.8
Brothers and sisters	1.1	2.7

Innovations in terms of processes

The functioning of the MOBP (Municipal Offices for Business Promotion)

At the outset of the project (September 2003), it was not sufficient to simply create and establish the MOBP; the challenge was to make them work. This necessitated the incorporation of activities that could generate dynamics among economic agents and were likely to expand and spread. With this approach in mind, the strategy of "productive chains" was incorporated, after "studies for selecting regional products with the greatest potentialities" had been carried out. Once the productive chains had been identified in each district, the MOBP promoters proceeded to bring producers together to form associations according to the selected productive chains, with the idea of "producing individually in order to sell in association in markets with a recognized demand".

The system of technology transfer and the local market for technical assistance

As part of the project to alleviate the problems of the low agricultural productivity of the Family Economic Units (FEUs) covered by the Project and the inadequate services offered by the local institutions, professional consultants with proven experience in guinea pig breeding, marketing, extension work and productive chains were hired to both train and assist the Potential Local Experts (PLE) and a number of the breeder members. Once the PLEs had grasped the technology, they applied themselves to providing technical assistance to the other breeders who had received no training or technical assistance from the consultants. In this way it was possible to massify the technologies, by sharing them with the majority of the breeders .

The firsthand training of the PLEs was carried out for the purpose of preparing squads of trainers so that once they had "qualified and graduated", they could sell their training services and technical assistance on the private local market for technical assistance. In this way the sustainability of the project could be guaranteed.

The precondition for receiving training and technical assistance was that the breeders had to be enrolled in a guinea pig breeders association.

Family investment by association members

The Project proposal with regard to family investment was that each member should be responsible for whatever investments might be required for breeding, as a means of balancing the investment undertaken by the Project. Thus, the breeders invested in the installation of pasture, the construction of infrastructure (sheds and cages), animal health products and breeding equipment such as warrens, forage, food and drink dispensers and disinfection equipment, without the need for assistentialist activities that undermine the valuation of the efforts made.

The investments made by the breeder families have always been in proportion to their generation of income and the growth of their breeding stock.

Innovations in collective action

One factor that has been present since the planning stage of the project is "associativism". Being a member was the essential prerequisite for receiving training and technical assistance.

In the particular case of the guinea pig value chain, associativism is strongest in the commercialization process. That is to say, breeding is exclusively a family responsibility whilst commercialization is strictly associative. The breeders pool their products at the level of the association or groups of associations in order to meet the supply quotas for the client markets, with whom in most cases they have signed contractual agreements.

Collective action can also be observed in the intra and Inter-family work. In family-based breeding, all family members participate and roles and functions are shared out according to sex and age. At the inter-family level, within their communal territorial areas, families practice "ayni", or reciprocal work between families, neighbours and friends, especially for building barns, sowing grass and carrying out other tasks that require a higher degree of manpower.

Creating a favourable environment

The PRODECO Project and its allied institutions are well aware of the rural Andean reality. This outlook has meant that the rural families have been included in a framework that is coherent with their realities and possibilities as well as with the economic and competitive context in which we live.

This engineering has made it possible to construct a favourable environment for the social and economic development of rural families, without forgetting about technological aspects, production costs, marketing, generation of income and utility margins, which are necessary in order for the breeders associations to endure.

All these requirements have necessitated subtle and gradual actions and attitudes on the part of the facilitators and extension workers.

5 Planning

The planning activities for the breeders associations were anticipated and encouraged.

Anticipation: through the hiring of consultants with experience in business planning and management, who trained, assisted and accompanied each association in the elaboration of their business plans and daily programmes in a way that was simple and easily understood by the members. Self-evaluation of these activities was carried out by the associations at district LED events, sponsored by the MOBP in which all the institutions in the district participated.

Encouragement: in the form of cash "prizes – encouragement – investment" for the winning organizations in competitiveness contests to find to best management, performance and achievement capabilities, to be invested in the development of the winning associations.

Achievements

In organization:

- The consolidation and self-development of the guinea pig breeders associations.
- The associativism of the producers, ensuring a solid and continuous supply of their products.
- The collaborative work done by associations from different districts in order to meet demands.
- The establishment and formalization of 20 guinea pig breeders associations in 14 districts.
- 705 breeders organized into 20 Associations.

In production:

- The increase in productivity (higher weight of the guinea pigs at the age of three months).
- Expansion of the agricultural frontier of cultivated pasture.
- The construction of infrastructures (sheds and cages) for guinea pig breeding.
- The growth and massification of the most productive guinea pig breeds.
- The increase in the number of guinea pigs bred for the market.

In marketing:

- The identification and incorporation of new markets on the breeders' own initiative .
- The reputation gained in the market for quality products.
- The substantial improvement in the prices of their products: an increase of 80% from S/. 5 New Soles to S/. 9 New Soles.

- The expansion of the range of products supplied in keeping with the demands of the market (skinned guinea pigs, pre-cooked guinea pigs, guinea pig pieces, sausages made from guinea pig meat).
- The step taken from individual sales to associative sales.
- 20 breeders associations linked to the market, maintaining direct business relations with their clients.

In local economic development:

- Participation of 30% of the breeders associations in the participatory budget of the Local Governments.
- 5 % of the breeders have made guinea pig breeding their principal economic activity.
- The breeders have increased their incomes by 30% in comparison with their initial situation. In turn, they have managed to capitalize on their assets with investments in sheds, wells and breeding equipment.

In gender equality:

- 49 % of the breeder members are women.
- 30 % of the associations are managed by women.
- 10 women breeders are acting as potential local experts, providing training and technical assistance.
- The integration of the family, allocating roles and lightening the workload of women.
- The generation and use of income by women breeders.

Objectives not achieved:

- 12 % of the breeder members are still not selling guinea pigs, which limits the strength of the supply.
- 2 % of the breeders who sell to the market do not respect the minimum quality standards.

Unplanned achievements:

- The diffusion of the Project to other locations in the Peruvian sierra (visits from institutions, demand for Local Experts).
- Participation of the clients as trainers, in order to adapt the products to their needs (pre-cooked guinea pig, guinea pig carcass, only males weighing over 1 kg).
- The operation of a local market for breeder guinea pigs with a high level of demand.

Main beneficiaries:

- 705 poor families, living in extreme poverty and affected by violence in the provinces of Andahuaylas and Chincheros.
- 45 Potential Local Experts in the process of being trained, accompanying the project.
- 10 qualified Local Experts, participating in the private market for technical assistance.
- 14 Municipalities (2 provincial and 12 district) within the scope of the Project.
- 14 MOBP Promoters .
- 3 Specials Consultants in guinea pig breeding and commercialization.
- The agents in the chain: suppliers of agricultural materials, transport contractors and transformers.

6 Biggest surprises

Based on market studies, it was initially thought that the main demand markets for guinea pigs would be Tipón (Cusco) and Caquetá (Lima); however, experience has shown that there is local and regional demand much closer to home than originally planned (Abancay and Huamanga), which it is still not possible to satisfy.

The direct participation of clients as trainers, enabling the breeders to adapt the products to the type of demand.

7 When and why might the initiative have collapsed?

The initiative might have collapsed for three reasons:

- assistencialism,
- the type of organization,
- the absence of a market approach.

To help give a better understanding of these points I will quote from the experiences of another institution, which describes the reasons for their collapse.

Assistencialism: The "X" development institute donated guinea pigs and grass seeds and provided materials for building sheds, veterinary products and training. As a result of this mistaken strategy, the members did not value the investment and lost any sense of ownership.

The type of organization: That organization involved women and mothers only, one of their functions being "collective breeding". That is, all the members were responsible for the breeding and had their own shifts. There was little sense of commitment from the members, nobody took responsibility for losses or theft because they did not attach much value to the donation.

The absence of a market approach: The training was related to aspects of breeding, since the objective of the organization was to breed and share the breeding modules with other mothers. There was no market approach of any kind and the breeders did not generate any income.

Why didn't the initiative collapse?

- Because in our project **each breeder member invests his own capital**, he or she and his or her family alone are responsible for the successes or failures.
- The breeders form associations **"for commercialization purposes only"**; breeding is the responsibility and risk of each member.

- The breeders have formed associations with **a commitment to sell to previously identified markets.** In other words "start from the demand to build the supply".

8 Concepts and methodologies applied explicitly and implicitly

The criterion of sustainability: Working with permanent institutions like Local Governments (Municipalities) gives the Project a certain guarantee of continuity. However, business encouragement is a new topic for the Local Governments within the scope of the Project, which is why is was necessary to incorporate the "Local Economic Development" approach so as guarantee the sustainability of the experience.

The criterion of competitiveness: This is a permanent criterion that has been transmitted to and incorporated into all the breeder associations, and thanks to which the associations are continually concerned with production costs, increasing production and productivity, expanding the product range, the presence of products and services on the market, product quality, opportunities etc.

The criterion of the market: First know the demand, then produce competitively to meet that demand. This concept is another strategy or requirement that has been transmitted to all the associations.

Applied methodologies

The methodologies utilized by the Project are simple, have a logical sequence and are appropriate for the users targeted.

Establishment and operation of the MOBP: Agreements were signed between the Municipalities and PRODECO and ADEA for the operation of the MOBP, with each institution given its corresponding responsibilities. The Municipalities are responsible for promoting LED and hiring MOBP

Promoters, PRODECO for support in equipping the MOBP, and ADEA for strengthening the business development of the endeavours.

In order to help the municipal authorities to understand the role of the MOBP, study trips and training courses on LED were organized for Mayors, Aldermen and municipal employees to participate in.

Creation and formalization of the associations: The MOBP Promoters and the PLEs were give the task of encouraging associativism among the rural Andean families. In order to do this, they called meetings in all the villages and towns in each district for the purpose of presenting the Project Proposal and LED to the inhabitants. Those who were interested voluntarily formed committees in their communities and these committees then joined the central association at the district level, signing the association's constitution act with its respective statutes.

Business management consultants were brought in to assist the members with the formalization process, which included a draft constitution, and public register and tax administration office procedures.

Study trips to successful projects: Study trips were organized to successful projects for the benefit of breeder members, municipal authorities, MOBP Promoters and PLEs.

Training and technical assistance for breeder members: For the initiation of the training process, three distinguished professionals were hired, all with proven experience in guinea pig breeding, marketing, extension work and productive chains. Their role was to train and educate the PLEs and breeder members.

Training and technical assistance was carried out by means of direct visits to the breeding sites, where groups of breeders could be practically trained and receive personalized technical assistance in each shed or breeding place.

Family investment by members: Each family was responsible for their own investments according to their possibilities and their guinea pig population, and they received Project support in the form of technical assistance

to help them with installing pasture, building infrastructure and equipment and administering veterinary products.

Training and technical assistance in planning and business management: Two professionals with business management experience were hired to give support with the formalization of the associations and the use of management tools.

Business meetings and conferences: Important negotiation spaces were created at festivals and fairs.

Market information system: Information on product supply and demand from the principal guinea pig markets was constantly provided.

Accompaniment in commercialization: Commercialization trips were organized with the accompaniment of the market specialist, for the purpose of formalizing negotiations, and training members in the delivery, sale and payment of their products.

Competitiveness contests between breeder associations: Intra and inter-district contests were organized in which breeder associations competed on the basis of production, commercialization, business management and sustainability, with cash being prizes given to the top 3 associations.

9 Market and government

Relative importance of markets

Markets have played a vital role in the experience and have been the mainstay of the project logic and the associations. Markets are cold and objective. At the beginning of the experience in particular, several products were rejected for not meeting the required quality standards; this gave rise to reflection and change within the breeder associations. The market is a place where monetary income from sales is generated, providing encouragement for breeders and reward for the efforts made by their families. The market demands constancy, imagination and the ability to overcome challenges.

These aspects motivate the members and generate important dynamics among them.

Relative importance of Government

Local Governments have acquired a good deal of importance within the project. They are the agencies officially responsible for generating development, mainly of an economic kind, within the process of decentralization currently taking place in Peru. They provide support for guaranteeing the sustainability of the present undertaking.

Reactions on the part of Local Governments to the experience have varied, depending on the quality and openness of their personnel. Some authorities and government employees have made positive contributions to the project, whilst others have shown indifference or even created obstacles.

Party political movements have been the source of most of these difficulties, particularly during the changeover of authorities and at the start of a new term of office.

On the positive side, some Governments have contributed to the experience by recognizing the breeder associations and including them in their participatory budgets.

The 14 Municipalities covered by the Project have now granted space for the location of the MOBP, they have taken on the responsibility for paying the MOBP Promoters, and some have assigned support staff.

Promoting Quinoa and Kiwicha Production in the Apurimac Department, Peru

Julia Anani Romainville Villasante

1 Brief description of the case

Since October 2003, the Project for Improving Agricultural Competitiveness to Reduce Poverty (PRODECO) has been working with impoverished farmers from the provinces of Andahuaylas and Chincheros, in the Apurimac Department. As their main crop, these farmers traditionally cultivated potatoes, a high risk crop due to both climatic phenomena and fluctuating prices, which sometimes reach lows of US $ 0.063 per kilo and do not even cover production costs.

The producers of Andahuaylas and Chincheros, several thousand of them in total, have recently taken to organizing stoppages, strikes and road blocks to put pressure on the Central Government to buy potatoes from them, following a fall in prices resulting from overproduction. This problem has been occurring for a number of years.

As an alternative to this problematic situation, the PRODECO Project has introduced the following crops: starch type white quinoas of commercial quality (Blanca de Junín, Salcedo INIA, Blanca de July, Kancolla) and black (Ccoito) and red (Pasankalla) quinoas; as well as the kiwicha varieties "Oscar blanco" and "Centenario". When compared with potatoes, the production costs for both black and white quinoa are approximately one sixth, whilst the costs of producing kiwicha are one quarter.[1]

1 Quinoa is a species of goosefoot grown as a crop primarily for its edible seeds. Its leaves are also eaten as a leaf vegetable. Kiwicha, also known as amaranth or pigweed, provides edible leafs and cereals.

In addition, the operations technology for quinoa and kiwicha has been developed using a value chain approach, based on a participative strategy with grassroots organizations and the methodology of '*learning by doing*'. The initiative has succeeded in significantly increasing the incomes of the participating families.

2 Brief timeline of activities

- Initially, the PRODECO activities began by working with the Municipalities in 11 districts, through the Municipal Offices for Business Promotion– MOBP, and are currently working with 14 districts, through agricultural associations promoted by the Project, on the production of organic quinoa and kiwicha destined for the export market via exporters located in the city of Lima (some 30 hours away by twenty-tonne capacity trucks).
- In the past, farmers in this area only cultivated local native quinoas, which fetch low prices owing to their high saponin content, small size and shrunken, opaque appearance. In the 2004-2005 agricultural campaign, the strategy began by introducing commercial varieties of quinoa (validation), which were brought from the Altiplano (Puno Region) and the Cusco Region. This validation was small-scale.
- In the 2005-2006 campaign, on the basis of the validation results, planned production began for the export market. The quinoa producer associations entered into a contract of sale with the company ARGOS EXPORT S.A., through which organic quinoa was finally exported.
- In the 2006-2007 agricultural campaign, production approached 70 hectares; 10 of these being red and black quinoa ("Ccoyto" and "Pasankalla"), and the other 60 hectares being starch type white quinoa (Blanca de Junín). Production is destined for the export market via two agricultural exporters located in Lima (HOJA REDONDA and INTERAMSA) with whom the respective sales contracts have been signed.

- In the case of kiwicha, activity began in the 2003-2004 agricultural campaign with the cultivation of scarcely 5 hectares of the "Oscar blanco" variety.
- By the 2004-2005 campaign, this area had increased to 30 hectares. In addition, in the following campaign, 2005-2006, the more precocious "Centenario" variety was introduced, which has a superior yield per unit area. In the 2006-2007 agricultural campaign, the net area planted is approximately 300 hectares.
- The commercialization of kiwicha is undertaken by two agricultural exporters: AGRO ORGANICO (exporting kiwicha to Germany) and INTERAMSA S.A. (exporting kiwicha to Korea) located in the city of Lima. Both companies are highly satisfied with the product, and a number of other companies, such as GREEN EXPORT, have expressed interest in exporting kiwicha.
- The quinoa and kiwicha producers associations at the district level plan each agricultural campaign by taking into consideration the quantities requested by export companies, as well as local requirements for supplying quinoa processing companies and for own consumption.

3 Activity promoters, main initial motivation or initial problem, and other relevant actors

PRODECO is a bilateral cooperation project between the Belgian government and the Republic of Peru. The initial motivation for the project was the fact that the Apurimac department was the scene of social violence that erupted in the 1980s, leading to social and economic problems that have left Apurimac in second place in the national poverty league. This gave rise to the proposal put forward by the Ministry of Women's Affairs – "PRODECO". The Project is located in 2 provinces: Andahuaylas, with 6 districts, and Chincheros, with 8, giving a total of 14 districts that are currently being promoted through the District Municipalities (Municipal Offices for Business Promotion - MOBP) with a Promoter in charge, and Potential Local Experts (PLEs) in different product lines (quinoa and kiwicha, native

potatoes, guinea pigs, milk, tara and avocado, dried vegetables) working in conjunction with Peruvian experts (consultants) for each product line.

4 Innovations in terms of production, processes, collective action and creating a favourable environment

- The quinoa and kiwicha producers, who are organized into associations at the district level, plan their production by taking into consideration factors including: communities/sectors, area, quantity of seed, demand for agricultural machinery, variety, and the number of participating families.
- The productive process is carried out based on the lessons learned in previous agricultural campaigns. It is important to bear in mind that in the past in the area described quinoa and kiwicha were not grown in entire plots but rather in furrows within other plots, usually of corn and broad bean.
- One of the principal innovations is the realization that good preparation of the soil is 50 % of production success (ploughing, raking).
- Another important innovation is organic control using organic preparations, including the elaboration of two types of liquid fertilizers (nitrogenated and phosphated) to correct nutritional deficiencies in the fenological phase of plant development. This process has also involved the preparation of organic insecticides using biocide plants ("chacanoai", "cicuta", "tarwi" and others), organic fungicides made from foliage and flowers from plants with fungicidal properties ("marcu", "camomile"), and the preparation of mineral 'soups' (sulfocalcium 'soup' made from sulphur and lime).
- The agricultural labour of weeding and pruning helps to maintain the characteristics of the plant varieties. Weeding out is done before the harvest in order to obtain a quality product.
- Mass selection is carried out by marking out plants displaying the desired characteristics for the variety, in order to genetically improve the seed obtained for the following agricultural campaign.

- Harvesting makes it possible to cut the plants that have reached commercial maturity, prepare them for drying in heaps in the same field until the commercial humidity is obtained, and then begin threshing (this stage was not carried out prior to the project). Threshing is preferably done by machine since it translates into savings for the farmer (consumer surplus).
- One important innovation is the implementation of the post-harvesting of quinoa and kiwicha, which consists of sifting, ventilating, airing (curing), sacking and storing the product (in accordance with certain criteria concerning the use of platters or platforms, stacking, ventilation, the absence of rodents etc).
- For each process the associations hold an assembly to agree on the programming for the use of machinery, supervisory visits and certification, as well as the date of delivery of the product to the company.

5 Plan and achievements

The main objective was to develop local capacity in the cultivation of quinoa and kiwicha, as alternatives to potato cultivation, using a value chain approach. This involved the specific objectives of promoting and strengthening the producer associations, implementing cultivation areas, providing training and technical assistance and organizing supply for commercialization. All of these objectives have been reached and even surpassed.

The unplanned achievements include:

- Advances in post-harvesting, which make it possible to offer quality products for commercialization.
- The market linkage of quinoa and kiwicha, which enables producers to negotiate with agricultural exporters from Lima.
- Another achievement has been the validation and introduction of commercially sought after varieties of kiwicha like “Oscar Blanco”, and “Centenario” and the white pearl grain quinoa varieties “Blanca de Junín”, “Salcedo Inia”, “Blanca de Juli”, the “kancolla” variety for

white four, and the “Pasankalla” and “Ccoyto” varieties of pearl grain red quinoa.

- The successful production and use of organic preparations, as well as the importance given to ecological soil management using mainly organic fertilizers (‘guano de islas’ seabird excreta, farmyard manure) for cultivation. The organic preparations include sulfocalcium ‘soup’ as a fungicide and insecticide, and 2 types of liquid fertilizers; one with more nitrated units that is used up until flowering, and the other with more phosphorous content that is used at the time of flowering and later during grain filling.
- Also being produced are toxic feeds, based on biocide plants, for pest control of rodents as well as sucking insects (aphids), and those that defoliate and destroy the grains (chewers of foliage and grains, like diabrotica rootworm, blister beetles, moth and nocturnal butterfly caterpillars).
- Another concept employed by the producers is genetic improvement through mass selection, which enables them to manage good seed. Before the project, seed was obtained by simply separating out a part of the main harvest and keeping it until sowing time.

6 Critical success factors

- Implementation of the development plan to increase local capacity (consultancy, technical production and management training, specialized technical assistance and socialization of knowledge) within the context of a productive chain approach.
- Development of a harvesting and post-harvesting plan for quinoa and kiwicha.
- Significant linkage to the agricultural export market.
- Organic production of quinoa and kiwicha.
- Inducement and sensitizing activities to strengthen the organizations (quinoa and kiwicha producers associations).

- Emphasizing food safety and drawing attention to the protein content and nutraceutic value of quinoa and kiwicha through food festivals.

7 Biggest surprises

- The vigorous increase in the areas of production, particularly for kiwicha (seven times greater than at the outset), which is grown 3,200m above sea level. The first campaign (2004-2005) began with 11 hectares of the proposed varieties of quinoa; there are now 65 hectares grown between 3,300 and 3,700 m above sea level, where it does not compete with kiwicha. The "Blanca de Junín" variety is the one most extensively cultivated.
- Many producers of potatoes and dried vegetables have switched over to production of kiwicha.
- It is possible to obtain up to 2 harvests of quinoa per year.
- The quinoa grains from the Altiplano (Salcedo Inia, Pasankalla, Ccoyto), have shortened their vegetative period and produce large grains.

8 When and why might the initiative have collapsed, why didn't it collapse?

The production of quinoa and kiwicha is most at risk from the climate and was affected by rain during the last two agricultural campaigns.

The price of kiwicha (S/. 2.6 New Soles per kilo of grain as raw material) was an incentive for farmers to opt for kiwicha, whilst the price for quinoa proved less tempting (S/. 1.5 per kilo of raw material). In addition, most companies want desaponified pearl grain, which reaches an average price of S/. 2.5 in Lima's wholesale market.

On the other hand, there is a need to develop the strategy with a view to commercializing pearl varieties of quinoa. Besides, more and more farmers

are becoming aware of the fact that quinoa has nutricional and nutraceutical importance and as a crop poses less of a risk than potatoes.

9 Concepts and methodologies applied

- "Learning by doing": a hands-on methodology, the principal variant of which is for local and national consultants and producers to regularly repeat daily tasks or activities (in one specifically designated plot), mainly in sowing, agricultural tasks, harvesting and post-harvesting.
- "From farmer to farmer": trained farmers are given the task of training another farmer using the "learning by doing" methodology. This technique is widely used in planting (a trained farmer helps another by teaching him how to sow).
- Posters, news sheets, leaflets and brochures are the tools used to manage information of a mainly numerical nature, relating to dosages, formulas, diseases, pests etc.
- Participative brainstorming is used for socializing concepts and ideas at each training event and/or technical assistance session with a number of participants.

10 Relative importance of markets, government, and networks

Markets: The main ones are the local (fairs and local buyers or 'acopiadores'), regional (transformation companies such as mills) and the national market, mainly located in the cities of Lima and Arequipa. Since their objective is to make profits, they do not take into account the prices or production costs incurred by the producer; however, their existence is necessary.

Government: It would appear that a fair market price has still not been reached, and greater support is needed to ensure this direct link: farmer – fair market price. It is essential that work be done on these policies.

Networks: Progress is being made here: as a result, the producers in each productive chain for quinoa and kiwicha have been identified in each district and work has begun on their entry in the registry of beneficiaries. Likewise, buyers (agricultural export companies), transport companies and suppliers of materials are also being identified.

Diversification of the local economy in Guyana‘s Region 10

Torsten Striepke

1 Brief description of the case

Region 10, one of ten provinces (called “Regions”) in Guyana is surely a marginalised territory taking Jörg Meyer-Stamer’s simplified typology of territorial economies into account. This matrix is about two axes: growth (stagnation-decline vs. sustained growth) and structures (strong vs. weak).

Region 10 stagnates in economic terms while dealing with exclusively weak structures, be they of governmental or of a private nature. Region 10 is characterised by the decline of the bauxite industry and massive lay-offs after privatisation since the 1990s. The last but one private owner, a Canadian firm (IAMGOLD Inc.), specialised in gold mining, has meanwhile given up due to pressure from the shareholders and sold the mine to a Chinese company (Bosai Minerals Group) owning other bauxite mines in China. However, new jobs have not been created yet. Apart from comparatively large transfers pouring into Region 10, especially into its capital Linden, the unemployed part the population is living on remittances pouring back into the country (Guyanese emigrants are mainly based in Canada and the US) or is trying to survive with family-run and small-scale businesses for which the typical entrepreneur has rarely a sufficiently concrete business idea.

Apart from the outstanding role of the bauxite corporation as the major employer in the region, thus having a crucial influence on local purchasing power, there are several other reasons at national level for the economic stagnation in the economy:

- despite its large geographical size, Guyana has a small internal market with only 750.000 inhabitants (of which 400,000 in its capital Georgetown),
- the purchasing power is rather low with the exception of a few better-offs,
- the inflow of substantial remittances allows for an acceptable lifestyle without a strong local effort,
- the infrastructural isolation of Guyana from its direct geographical neighbours limits access to bigger markets,
- the ongoing territorial disputes with Venezuela and Suriname about oil areas deter investors,
- an overall negative image of high crime rates, frequent flooding in the capital and money laundering is limiting investments,
- “red tape”, inefficient bureaucracy and corruption hamper business activities,
- ongoing ethnical disputes between Guyanese of mainly Indian and of African origin leave Amerindian, Chinese and Portuguese minorities as spectators.

2 Brief timeline of activities

The Linden Economic Advancement Programme (LEAP) started in 2002 with the aim to diversify the regional economy and to ultimately create 1700 jobs in Region 10, be they self-employed or employed. In today’s technical cooperation landscape, it is an unusually long project with June 2009 as its deadline. LEAP is designed as a project with an unusually great mix of activities offering assistance in a number of sectors such as infrastructure (with the greatest budget allocation), agriculture, business services, credit, tourism, handicraft, logging, etc. apart from its institutional development efforts with the local Business Chamber, business associations, the provincial Government and the Linden Town Council. The general improvement of the labour market with reintegration training for laid-off employees and

specific job training for staff of newly opened enterprises (call centre, hospitality businesses) was another focal point. There were no project-internal limits in responding to initiatives and activities from the target group because LEAP acted as a fixed-term quasi governmental development agency in Region 10 with the benediction of the Ministry of Finance.

Among the multitude of activities, LEAP organised two PACA interventions in collaboration with Mesopartner (June 2005 and April 2006) which were meant to provide a stimulus to local economic development through the exploitation of competitive and comparative advantages in selected sectors based on the identification of endogenous development potential and to provide an initial kick to the elaboration of a Regional 5-year Development Strategy.

3 Driver of activity and other relevant stakeholders

LEAP was the initial driver, expecting that the Regional Democratic Council (RDC), Region 10's provincial administration, the Regional Chamber or some entrepreneurs from different sectors as major stakeholders would get excited and drive the process further to fruition. Unfortunately, these hopes did not materialise across the board; very few "PACA champions" in the tourism and agriculture sectors showed some initiative to carry the process further.

LEAP organised and paid for the PACA consultants (at least moderate rates to compensate for the loss of income incurred during their active days!) during the initial phase of 3-4 months. Some of them were very active during their assignment though most of them were strangers to the sectors.

The "Linden Chamber of Commerce, Industry and Development" (LCICD) as a representative of the private sector would have been the "natural" driver of the PACA process. Retrospectively, it might be considered as a mistake

not to have channelled the whole PACA initiative through this organisation but there were genuine problems to do so.[1]

4 Impact of the PACA intervention

Through the PACA exercises, a lot of information has been collected on several sectors such as tourism, agriculture, forestry and logging, carpenters and handicraft, transport, and mining, hence contributing to an excellent data base for the elaboration of the "Regional 5-Year Development Strategy". The whole PACA process has been carried out along the prescribed line (kick-off workshop, mini workshops, result workshop, way-forward workshop). Some participating entrepreneurs have been designated as champions during the way-forward workshop at the end of the first intervention.

A competent local PACA host did not turn up during two years so that LEAP carried on with that function although by its very nature it could only be a catalyst for a limited time, since the Project ends in 2009. A number of institutions (local Chamber, local Government, business associations, and a technical institute) showed interest without coming officially forward and declaring their concrete willingness to steer the process. That result is typical for a territory with weak structures[2], hence avoiding accepting challenges and remaining in a spectator's position.

The following sectoral impacts were achieved:

- Logging: The provincial federation, although founded after lengthy talks and several meetings in pursuit of the first PACA intervention, proved to be inactive despite a number of activities for loggers initiated on the national scale.

1 It cannot be concealed that the new EU EDF 9 administrative rules would have turned this undertaking into a very complex, difficult and almost impossible task. Also, the internal desolate situation of the Chamber in June 2005 did not really allow for this option.

2 The criterion "weak structures" doesn't refer to the sheer number (there might be many!) but rather to their capabilities and persuasion powers!

- Handicraft: Conflicting interests among the members of the "Linden Handicraft Association" contributed to its sudden death although it was already organised as a full-fledged association.[3]
- Agriculture: LEAP provided intensive assistance to the "Region 10 Farmers Association" through external consultancy inputs, payment for its secretary, hire of some active members as supervisors in a land-clearing exercise, linkage of members to agricultural exporters and buyers at national level, and printing of information newsletters as well as financing of stands during exhibitions. All these activities were achieved with the active assistance of an increasing number of farmers. That critical mass from among participating farmers was required to achieve these successes.
- Transport: No single activity was implemented by the workshop participants.
- Tourism: The termination of an external intermittent consultant's term marked the end of clearly defined and well-planned activities of the "Region 10 Tourism Development Association" with two exceptions – the acquisition of external funds (another EU micro project programme) for the construction of a tourist lodge at Rockstone and the set-up of a web site (www.lindentourism.com). The "Rockstone Tourism Association" (RTA) was directly supported by LEAP personnel as a pilot activity in this promising sector; the Rockstone Fish Festival was successfully organised in October 2007 for the second time.
- Local Chamber: It turned out to be divided over petty questions, quarrels for posts and dominated by general inactivity regarding major economic questions. Nevertheless, a Chamber web site has been created (www.lindenchamber.org.gy) and a town development and -

3 Although it is well known that the founding of associations is just a means to an end, the concerned entrepreneurs (in the logging and the handicraft sector) came out strong in favour of this "solution". In particular, the handicraft group had well attended weekly meetings over a period of four months with a number of smaller activities (exhibition, press interviews, handicraft catalogue, etc.) until a handful of them engaged in jealous in-fights leaving the association paralysed.

beautification project (again with financial LEAP assistance) was started.
- Regional Democratic Council (RDC): the Provincial Government fully concentrated on the elaboration of the "5-Year Development Plan" with intensive consultations of all communities, sectors and relevant institutions in the Region. By June 2007 the first draft has been accomplished, again with massive support by LEAP. But nevertheless, at least it has been accomplished!

5 Critical success factors

For the few successes reported (agriculture, tourism), credit has to go to a handful of conscious activists and the LEAP project. The expectation of short-term gains and economic possibilities coupled with a certain critical mass of local entrepreneurs involved were the crucial success factors (see also section 7). However, the decisive question should be asked as to whether the omnipresence of LEAP did not prevent from achieving maybe smaller but more sustainable successes!? Given the above mentioned "dependency syndrome" in the area, local entrepreneurs and the general target group (including employees as well as jobless people) totally count on LEAP to step in whenever problems arise. This attitude resulted in a certain subconscious behaviour of "wait and see" whereby own inputs in terms of work and money are withheld, particularly if direct and immediate benefits cannot be expected.

6 What was the biggest surprise?

The collaboration of the "Region 10 Tourism Development Association" with the newly founded "Rockstone Tourism Association", ironically behind LEAP's back with the aim to ask for third party funding in order to set up a tourist lodge in Rockstone, came as the biggest surprise. This was a purely local initiative which deliberately neglected LEAP! However, a number of avoidable mistakes in contract formulation created a variety of new problems (such as lack of clarity about the target group's own labour

input, neglect of the lodge's furniture and surrounding infrastructure, lack of determining both parties' duties and responsibilities as well as vagueness about the lodge management) for which LEAP's assistance was sought again.

The quick growth of the Farmers Association with more than 150 members after a few months was an unprecedented development. It shows that the expectation of better production opportunities and sales through organised basic works (such as land clearing with substantial own contributions to prepare the ground for an increase in agricultural activity) attracted a relatively large crowd.

7 Possibilities to conduct the PACA approach in marginalised regions

Other articles in this reader ask the question "when and why the initiative could have collapsed, but did not, and why not?" which is easy to answer in Region 10's context: it's the presence of LEAP. Being a special case, it seems more appropriate to deal with possibilities and limitations to conduct PACA in marginalised territories.

Region 10 is not only characterised by weak organisational structures and economic stagnation (see table 1). It has an overwhelming black population, and hence stands for political opposition against the Indian-dominated Government[4]. In case anything goes wrong, the central Government is blamed; it's the general opinion in Region 10 that Government MUST assist. And indeed, Government pours a lot of money and assistance into Region 10 which again provokes a feeling of dependency and "we can't do anything without external help" attitude despite the usual outcry for more support.

What could be a genuine stimulus may look like a "carrot" to the active population (and hence might be rejected!) and which would end up in a bottom-up development approach? Both positive examples above from the

4 There is only one more Region in Guyana (altogether 8 out of 10) which is dominated by the "People's National Congress Reform – One Guyana" (PNCR-1G), the party of the citizens of African origin.

private sector (tourism, agriculture) as well as that one from the regional administration (5-Year Development Plan) have shown that result-oriented self-help efforts are possible! Of course, they can't be generalised but they indicate a certain tendency, at least for those activities in the private sector!

A relatively short way and distance to expected economic progress seems to be one strong argument. Obviously there is a higher likelihood in the minds of the actors when responsibilities are widely scattered[5] and when the participation of many other people with the same objective appears is assured. This again provides the feeling and conviction that this way can't be wrong. Another one is the active involvement of respected local leaders which again signifies unconscious following rather than a truly dedicated entrepreneurial decision. A series of (even minor) positive activities signals that things are moving which brings more entrepreneurs to join in following the logic of the argument mentioned before. Positive feedback in terms of newspaper articles, TV interviews or radio reports coupled with positive comments from potential economic partners (here: buyers/exporters of agricultural products or a successful organisation of a tourism event) or an increased network providing brighter prospects weld actors together and provide group "fighting spirit". It is not a coincidence that this sounds like the good old SMART rule of setting objectives (Specific, Measurable, Achievable, Realistic, Time-bound), the validity of which is highlighted again in this context.

And don't the above mentioned reasons look like the well-known psychological basis of all development efforts to which PACA also adheres to? Organise an economic activity providing a small step forward which in turn is the cradle for more spin-off effects and activities, hence ending in snowball effects and a movement spiralling upwards!

So, what makes the difference to non-marginalised territories? As it seems, it is only the depth of activities and the number of sectors tackled! This again shows that we have to dig deeper in order to identify activities which are more convincing compared to "normal" circumstances. It also indicates that the guidance factor (PACA champions, PACA consultants, backstage

5 This is truly a non-entrepreneurial but rather a risk-avoiding reasoning!

support by LEAP) has to be tackled differently. With a given target group in a given economic environment and in view of the intended changes the only factor which can be varied is on the interventionist's side, hence LEAP's or the main actors' attitudes and activities with that group! Following a valid pedagogical principle, we have to take the target group from where it stands right now and design our interventions accordingly. In the case of LEAP we were too shallow on one hand and too "pushy" on the other.

All interventions will have to aim at building trust and confidence before any further activities can be undertaken. Viewed from the target group's perspective there are high psychological and economic obstacles to overcome. In a society used to serve as employees with an all-inclusive social service (health, schooling, shopping) since decades and to receive remittances without lifting a finger, there is a higher barrier to change habits. It is the shift from the totally dependent to a self-determined life style where own decisions and stamina are required!

An external interventionist like a Project must understand these underlying forces by tailoring its activities to these conditions. More concretely, it should have dedicated more accuracy and care into the PACA approach making it its major intervention methodology. Unfortunately, PACA has not been thought of during the conception phase of LEAP. The local PACA consultants residing in Linden who were supported by LEAP only over a short period of three months should have stayed on at least for one year[6] or they should have been substituted by professional subject matter / sectoral consultants to push activities from back stage during the initial phase.

The creation of trust and confidence is a longer process in that environment, being a key factor which needs adequate consideration. As it actually developed, PACA came about like a short-breathed fashion not able to create longer lasting confidence in all sectors. People who are irritated and insecure about their future need to develop faith into emerging alternatives; they have to feel and taste the benefits of a different approach (quick wins through small but powerful activities).

6 Proof: wherever previous PACA consultants have been substituted by intermittent long-term consultants positive results emerged.

8 What was the relative importance of markets, government and networks?

Markets: Without positive prospects of markets in the agriculture (manifest demand for crops in Guyana and in Caribbean countries that depend on tourism and which are unable to increase agricultural production due to land limitations) and tourism sector (high demand for weekend entertainment and tours; existing international demand for birding and adventure tourism), the positive developments would not have taken place. Markets in handicraft (largely depending on tourism), transport and related services as well as furniture are less obvious, hence acting less as a driving force for the concerned local actors.

The situation around logging (and down the value chain to local furniture making and exporting) is more complex. Despite the huge demand for different species of rainforest wood, there is a "cream" of nationally and internationally owned companies which share the cake leaving little room for the smaller loggers like those in Region 10. Possibilities to change this situation through a better organisation were not fully realised by the actors (lack of confidence); they kept on fighting their way on an individual basis dealing with their small markets which they mastered. The lack of drying kilns in Region 10 made it also difficult to add value to their products.

Government: The national Government is working hard to make sure that Guyanese products and services become more competitive in the world, particularly in the logging/furniture, agriculture (export) and tourism sectors. However, entrepreneurs of Region 10 are still hesitant and somewhat cut off the flow of information; again, the lack of confidence in the Indian-dominated national Government might play a role.

The local Government of Region 10 is not powerful enough to create an enabling environment for the regional economy; the elaboration of the "5-Year Development Strategy" must be seen as an effort to get out of this inactive corner. For the time being, the local Government rather acts as a loudspeaker on behalf of the population amplifying their outcries and calls for justice and a better life; particularly as far as the employment strategy of the mine owners is concerned.

Networks: They were extremely important as could be seen in the agriculture and tourism sector. New worlds were opened to the "Rockstone Tourism Association" when they joined the national "Tourism and Hospitality Association of Guyana" (THAG). They got invitations to meetings, had access to tourism agencies in the capital for their promotional work and benefited of training programs. Likewise, the linkage of Region 10 farmers to national buyers, exporters and research institutions made future prospects more tangible, hence encouraging all activities on the ground.

For reasons of comparison: Guyanese handicraft producers and transporters do not avail of similar national networks so that a decisive push for regional activities could not be provided. Again, it's different for the loggers who are well organised on a national scale (bigger companies only) but excluding the smaller ones who would desperately need to establish their own network as a counter balance measure to access foreign markets.

9 Final remark

The diversification of the local economies in marginalised territories like Region 10 in Guyana requires a) a thorough planning with a consistent strategic intent carried out by the driver (local authority or Project) taking the local economic development as its centrepiece, b) a good selection of sectors where quick win-win activities based on the SMART approach can be realised (i.e. a reliable market demand and a solid network), and finally c) excellent facilitators as well as local PACA Champions and consultants who avail of sufficient back-up (financial support) and time to build up trust and confidence with the local actors. As neither the bad economic situation of the locality nor the poor performance of existing structures and institutions can be changed abruptly, it falls back to the driver to design an appropriate strategy. Despite the limited success with the PACA approach in Guyana's Region 10, I am convinced that even marginalised territories can benefit from it if adequately planned and carried out. It's up to the practitioners to learn the lessons and to act accordingly.

Upgrading Smallholder Farmers in Mafra, Brazil

Jörg Meyer-Stamer

1 Brief description of the case

Since 1996, an NGO called Banco Nacional de Agricultura Familiar (BNAF) has worked with poor smallholders in the northeastern part (Planalto Norte) of the state of Santa Catarina, Brazil, combining the introduction of new varieties and technology with a management of the entire value chain. Based on a genuine bottom-up approach, it has managed to significantly increase the income of several hundred families. As a result of a diagnosis of the local economy that was conducted by the local business chamber (Associação Comercial e Industrial, ACI), BNAF's activities were linked with other players in the local economy.

2 Brief timeline of activities

- Creation of BNAF in 1996, working at the municipal level with groups of farmers to produce tomatoes in tunnels, selling them at the wholesale market in Curitiba (about two hour's drive away)
- A rapid diagnostic of the local economy in 1998 created a link with the ACI and generated a move towards direct commercialisation at the local level
- By 1999, the effective collaboration between BNAF and the biggest local supermarket led the supermarket owner to deposit liquid funds at the Credit Cooperative that collaborated closely with BNAF, thus enabling BNAF to expand its scheme and involve more producers

- In June 2001, BNAF at national level was wound up; the agency at local level continued working yet was in limbo
- In May 2002, a "Regional Commercialisation Agency" (ARCO) was created to carry on BNAF's work and to expand it to the entire region ("Planalte Norte")

3 Driver of activity, main initial motivation or problem, other relevant stakeholders

BNAF is an organization that emerged from the "grito da terra", a major social movement of landless and poor smallholders that in the mid-1990s criticized central government for abandoning agriculture and creating framework conditions that benefited only large commercial farmers. Central government responded by making a limited amount of seed money available to Fundação Lyndolpho Silva (FLS), a national-level non-profit organisation that created five local-level BNAF agencies in different parts of the country and initially funded BNAF's activities. Each agency acted in an autonomous way and was effectively run like a professional non-governmental organisation.

After the seed money from FLS had run out, BNAF funded its activities (a) through a 5% cut on the sales of products and (b) through government funds that aimed at specific projects (e.g. the creation of a processing facility for a specific product). BNAF professionals were intrinsically motivated to work with poor smallholders in a part of Santa Catarina that is relatively poor, even if they might have found better paid but less rewarding employment elsewhere. Many smallholders had been part of an outgrowing system of a large tobacco company. This activity, however, created ever smaller incomes as prices went down and input costs up. Farmers urgently needed a new source of income and were thus keen to get involved in BNAF's activities.

From 1998, the local business chamber (ACI) supported BNAF's work. It had developed an interest in local economic development because of the

perception that the local economy was stagnating and heading for decline. A rapid diagnosis of the local economy highlighted the work of BNAF, which other local actors so far had not been informed about, and it gave rise to an ongoing communication process between BNAF and ACI.

Other relevant stakeholders are a local credit cooperative, Crediplanalto, which is linked to the and the owner of the largest chain of supermarkets in the region, owning seven stores plus one mobile shop (a truck that went into deep rural areas) who was also very active in the ACI. The provincial agricultural extension agency was important since it provided a one-week training course to farmers when they first got involved with the BNAF scheme. FLS played a role in terms of providing know-how on international best practices.

4 Innovation in terms of production, processing, collective action and enabling environment

BNAF introduced new varieties (melons, cucumbers, carrots, beans, green pepper, red beet, zucchini, honey) and new production techniques, in particular the use of simple tunnels and drip irrigation.

BNAF set up small-scale processing facilities for vegetables and honey.

Regarding collective action, effective collaboration between an NGO with a leftist political orientation and the conservative ACI was a major innovation.

5 Plan and achievements

BNAF was aiming at creating new income opportunities for a significant number of smallholder families. After five years of operation, about 600 poor families benefited from the scheme. Income increases were substantial, manifesting themselves in many families moving from wooden huts into stone houses.

Apart from producing new varieties, BNAF set up processing facilities for vegetables, honey and beans, something that had not been envisaged at the outset.

BNAF constantly scanned the market for new opportunities, in particular new products that could fill uncontested market niches.

6 Critical success factors

- BNAF's management of the value chain, starting with systematic market research in order to identify market niches with big margins so that the risk was limited. BNAF set up an inverse auction to reduce the cost of inputs. BNAF organised transport of inputs to the farmers and the transport of produce to the market, relying on commercial transport operators. Groups of farmers were trained in production and packaging techniques, so that the produce could be put directly onto the shelf at supermarkets.

- Collaboration between BNAF and the local ACI, which was crucial for trouble shooting, for instance when the three local input suppliers needed to be convinced that forming a cartel against BNAF would be a shortsighted move.

- Persistence of project champions, even in face of strong pressure from incumbents and organisational discontinuity.

7 Biggest surprise

- Smallholder families invested a substantial part of their increased income into the education of their children, many of whom decided to use their new skills to upgrade the family farm, rather than seeking employment elsewhere.

- Initially, the main product were tomatoes, where market research had pointed at a opportunity for tomatoes produced in tunnels that could enter the market earlier than tomatoes grown outdoors. The most successful product, however, turned out to be strawberries, thanks to a non-local variety (plants imported from Chile) and to a very effective production technology.

8 When and why could the initiative have collapsed, but did not, and why not?

The success generated resistance by incumbents in the market. For instance, one group of producers set up a mini-dairy and sold not only to supermarkets but also to schools. A sales representative of a major dairy company bribed a local health inspector to condemn the product of the mini-dairy. A swift response by BNAF and the ACI defused this action; essential in this case was the credibility of the ACI with the local media.

After the demise of BNAF, a lengthy discussion erupted between local stakeholders regarding the structure of the to-be-formed new organisation which was fundamental in character, i.e. addressed issues like adherence to business principles versus the proposal to experiment with solidarity-based organisational principles. Ultimately, the proponents of consistent business principles prevailed.

9 Concept and methodology explicitly or implicitly being used

- The scheme adhered strictly to business principles. BNAF extension staff was versed not only in technical issues but also in business principles.

- Producers were organised in “associations”. BNAF staff only interacted with associations, not with individual farmers, thus creating a strong leverage of the limited number of staff (five professionals).

- Producers disliked the idea of setting up cooperatives, which had existed in the past and had collapsed at some point due to incompetence and corruption. Associations were strictly a venue for joint purchasing and marketing.

- The whole scheme was, in a positive sense, opportunistic, i.e. constantly looking for and responding to new opportunities, rather than spending much time and effort with strategic planning exercises.

10 Relative importance of market and market failure, government and government failure, network and network failure

The whole scheme was embedded in a competitive, relatively thick market for fresh vegetables and fruit, as well as a functioning market for inputs.

Government was relevant in that the producers who formed a new association went through one week of training at a centre of the provincial government’s agricultural research centre. Otherwise, government hardly played a role.

Network played an essential role in terms of producers’ associations and the collaboration between BNAF and the ACI.

Conclusions: How to launch and sustain LED

Jörg Meyer-Stamer

LED is not an event. LED is also not a routine activity in the way, say, vaccinating kids against polio or educating young agronomists are routine activities. LED is rather an organic process. It is something that lives, and it lives through the dedication of individuals who commit themselves to it – some of them as part of there paid job, some others because they except some kind of tangible benefit, yet others because they get recognition or some other kind of intangible benefit from their involvement.

Accepting that LED is a process has implications. One of them is that LED can only be planned to a certain extent. You don't know which local stakeholders will support your LED effort one year from now. Perhaps some of the main drivers have become disappointed by then and dropped out. But then again, maybe they are getting increasingly excited, and they have pulled in other players who bring more know-how, better connections and more resources so that activities become possible that you wouldn't even dream of today.

1 Sequencing of LED

It is, thus, most adequate to conceptualize and design LED as an iterative process. It has proven to be a good idea to kick off an LED process with a quick scan or rapid appraisal, identify options for practical activities, and implement them swiftly so that visible results emerge quickly. LED champions need something to show in order to sideline the eternal nay-sayers and in order to make sure that resources are allocated to LED. Trying to launch the LED process by trying to address one of the really big issues is a recipe for disaster. LED champions should prioritize activities that are unlikely to fail and yet address some issue that is felt to be pressing by local stakeholders, in particular businesses.

One of the principles at this stage are the basic rules of "Open Space Technology": Whoever participates is the right person, and whatever happens is the only thing that can happen at this moment. At the outset of an LED process, it is not advisable to try to mobilize all the relevant groups. The local council is the right place to practice representative democracy. LED should involve those who can contribute something and who have something to gain directly from economic development initiatives.

At the outset, it is also not advisable to insist on a comprehensive planning process, since local stakeholders will find it difficult to plan something they can barely imagine. Once the process is gaining momentum, this changes. Now one would consider to address players who have not spontaneously volunteered to get involved and to try to get their buy-in. Now one would also use at least basic performance management tools, for instance a participatory variety of the Balanced Scorecard.

In particular for local government, it is crucial that its approach to LED is "light touch". If local government appears to act in a heavy handed way, other stakeholders will either be de-motivated and frustrated, or they accept that local government is taking full responsibility for delivery of LED and withdraw. In either case, the result is most unfortunate, since few local governments – and hardly any local governments in rural areas – have a sufficiently large and skilled LED unit to be able to pull off a significant LED process on their own. Local government needs the continuing support of other stakeholders, who should take care of actually delivering most of the LED activities. Local government should primarily play a facilitating role (and concentrate on its core tasks, such as infrastructure provision) and allow the LED process to unfold in a flexible, responsive way.

2 The role of strategy in LED

The concept and role of strategy in LED is object of controversies. Some authors see strategic planning at the heart of LED. Other specialists maintain that the terms "strategic" and "planning" should not used in the same sentence.

Following the terminology of management author Henry Mintzberg ("Five Ps for Strategy"), we suggest to conceptualize strategy in the context of LED in the meaning of "position", "pattern" and "perspective" (rather than "strategy as plan," i.e. as a written document).

- Strategy as position is about locating a local economy in a number of very clearly defined market niches, and developing specific competitive advantages to establish a dominating position in those market niches, in order to be able to appropriate rents (as opposed to entering into a price underbidding game in highly competitive commodity markets).

- Strategy as perspective is about conceptualizing territorial development in a consistent way, having the key stakeholders aligned behind a shared perspective of where to go and how to get there, and having a shared perspective of what territorial development does, and what it should not do.

- Strategy as pattern addresses the consistency of behavior. It is the outcome of alignment of relevant players around a shared perspective. It is based on consistent behavior, especially if actors take decisions on their own without constant consultation.

The purpose of any LED initiative is to transform the economy in the location. The objective is to create growth and income with a strong emphasis on equitable distribution, based on economic empowerment for previously disadvantaged communities. The key challenge is to define strategy as perspective and as position. Each and every location has a comparative advantage in something, since comparative advantage has been defined since David Ricardo as the least dramatic disadvantage – if a location has no absolute advantage in anything, it should focus at its comparative advantage. Many locations also have some kind of competitive advantage, i.e. some kind of activity where local players are better than most competitors elsewhere. LED should start by improving on existing comparative and competitive advantages. Often, its main thrust will involve an effort to move from comparative to competitive advantage, i.e. to organize an effort – based on individual entrepreneurship and collective effort – to create a specific advantage that cannot be easily replicated by competitors elsewhere.

LED initiatives should not be based on wishful thinking, i.e. trying to create industries or economic sectors that don't exist and where no existing advantage can be leveraged.

Strategy as perspective is about the way a mature LED initiative will operate. What LED stakeholders want to identify are catalytic projects that have a potential to leverage the upgrading and the development of a specific competitive advantage. At the early stage, the LED process needs to aim at quick wins in order to build momentum. Once the momentum exists, LED will aim both at further quick wins and at significant interventions that address critical bottlenecks or highly promising opportunities. Such significant interventions can rarely be planned and implemented in a matter of months – that is why we emphasize the importance of momentum.

Underlying the process focus in LED is the understanding that successful LED is, among other things, a learning process. Local stakeholders learn about each other's rationality of action, and each other's preferences, but also about the underlying concepts and principles of LED. If this learning process is allowed to evolve in an organic way, a strategic perspective and a clear idea of promising strategic interventions will evolve quite naturally.

3 Who is involved in LED?

LED may involve four different types of actors: Local government, public sector organizations that are locally active yet report to higher levels of government, the private sector and its organizations, and local communities and their organizations.

3.1 Local government

In the context of LED, local government has mainly two responsibilities. First, it needs to create an enabling environment. Second, it should facilitate selective developmental activities.

The ability of local government to play a developmental role is closely linked to its ability to create an enabling environment. Providing infrastructure and processing permits are core activities of local government. If it does not deliver a good performance in this respect, its credibility is compromised. A local government that has little credibility will not be taken serious as a developmental player by other local actors, in particular successful business people.

Local government should not get involved in setting up and running companies or quasi-businesses ("projects"). Not only turn such interventions rarely into sustainable operations. They may even damage the local economy. Let us imagine the following scenario to explain this point. Local government decides to subsidize a project where a few poor families grow vegetables. The families actually produce some vegetables and sell them to, say, hawkers. Before this, the hawkers used to purchase produce from other poor families who produced to make a living, without receiving any government support. Now, the old producers are without a buyer for their produce, i.e. they are worse off than before. The new producers are better off. For the hawkers, nothing has changed. Government has spent money that it could also have spent on something useful. The net effect is negative.

Local government must play a facilitating role in developmental activities. For instance, it should not send out its own officers to directly manage projects, such as the vegetable project just mentioned. It should rather try to match communities and producers that need support with potential supporters, which may be companies, NGOs, or specialized governmental organizations. Another approach is to investigate market failure, in particular obstacles that stand in the way of successful economic activities ("barriers to entry") and identify ways of lowering them. Since government regulations and deficient infrastructure are often creating barriers to entry, government can play a direct role in lowering them. In other regards, for instance lack of information on business opportunities, government can play a facilitating role by organizing business events.

3.2 Local public sector institutions that report to higher levels

National and provincial ministries and para-statals often have decentralized structures, e.g. in education and skills development, agricultural research and extension, or infrastructure development. These decentralized structures are accountable to their headquarters. They are typically not accountable to local government. In fact, local government often has no idea what these structures are up to. Sometimes, local government does not even know that they exist. At the same time, those structures do not necessarily have clearly defined objectives. Here lies the opportunity for local government, which may be in a position to identify the potential contributions from such structures and match them with local needs.

3.3 Private sector and its organizations

Any local economy is driven, first and foremost, by the private sector. This does not necessarily mean, though, that there is somebody in the driver's seat. The structure of the local economy is primarily the result of market processes. The private sector may organize itself to address collective interests. However, when this happens in practice, collective action is often limited to ad-hoc lobbying vis-à-vis government. In most developing and transformation countries, it is rare to find local business chambers or sectoral business associations that effectively address collective problems and provide a variety of services that are not provided spontaneously by individual businesses. Moreover, such organizations primarily tend to exist in major cities, not in rural towns.

The need to organize collective action in the private sector is often one of the first things that is mentioned by companies in an LED process. However, an LED facilitator should encourage private business people not to start their LED effort by creating a formal organization. This often ends in limbo. Not only are the technicalities in terms of how to set up an organization not clear. Moreover, some business people don't trust other business people so that the question of who will be the president of the organization becomes highly divisive. Rather, business people should create an informal

group that addresses clearly identified, specific issues. Over time, as a certain level of trust evolves, this group will turn into a formal organization.

Regarding issues that can be divisive, one should also mention party politics. A local business association that gets infected by party politics, i.e. where leading figures campaign for competing parties, is effectively paralyzed. A local business association that is quite visibly launched by a "political entrepreneur", i.e. an individual with obvious political aspirations who uses the association as a vehicle to build political clout, will have only a temporary impact and will flounder once the political entrepreneur moves into some political office.

3.4 Local communities and their organizations

Local communities can play a crucial role in LED, in particular when the organize themselves in a genuine bottom-up way and use the LED approach to address problems or opportunities in a business-like way. This does not necessarily mean that they have to run for-profit businesses, but it should mean that whatever venture they launch is based on business principles. One of those principles is that group activities are economically not sustainable. A business with 20 CEOs and no employees cannot work.

The risk regarding community economic development is that communities may be exploited by political entrepreneurs who may be effective in mobilizing resources, thus creating dependency, and who try to make sure that they control everything, thus stifling initiative, learning and the personal growth of community members.

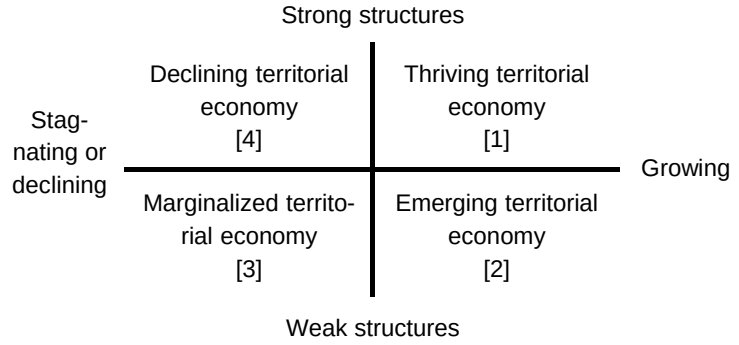
3.5 The best case and the worst case

By way of summarizing these considerations, it is easy to depict LED heaven and LED hell. LED heaven is a place where entrepreneurship flourishes and entrepreneurs find it easy to get into business, where government creates an enabling environment and otherwise takes a facilitating role, and where various stakeholders create temporary or permanent networks to address specific opportunities and problems. LED hell is where government tries to run businesses, where business people spent most of their time lobbying government for protection and subsidies, and where various networks compete for political influence rather than solving some practical problems.

4 LED in different types of locations

There is no one-size-fits-all approach in LED. LED processes need to be designed and managed according to the specific features of the local economy. It is, however, possible to outline four ideal types of local economies. In order to distinguish locations in a systematic way, we suggest to apply two criteria. One criterion is the strength of economic structures in the local economy, both with respect to producers and business and with respect to supporting institutions. The other criterion is the ongoing pattern of economic evolution. The following matrix combines the two criteria.

Table 1: A Territorial Typology Matrix



1 A growing economy with strong structures has a long tradition of successful economic development. The local economy is dynamic, driven by competitive companies and perhaps a cluster. Businesses can rely on a solid infrastructure and good factor conditions.

2 A growing economy with weak structures is still in the early phase of its growth process. It may, for instance, be driven by an emerging cluster which is the result of innovative entrepreneurship and localised imitation. Yet the infrastructure is not yet developed, and factor conditions are deficient.

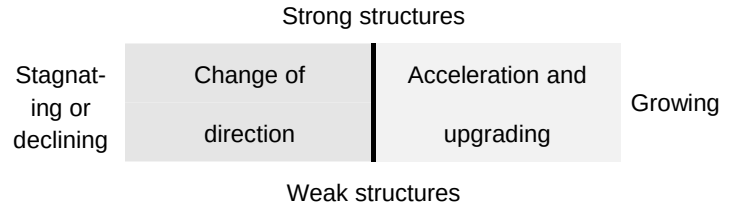
3 A stagnating economy with weak structures is a phenomenon that we often find in peripheral regions. There are only limited local production activities, including subsistence agriculture, and the main sources of income are remittances and government transfers.

4 A stagnating or declining economy with strong structures is suffering from the structural decline of the main local industry, typically because the main local cluster or sector has lost its competitive edge vis-à-vis domestic or foreign competitors (or maybe it never had one and is now falling apart after the borders have been opened to foreign competition).

Intervention approaches need to take the local structure into account. The approach in type 1 and type 2 economies needs to be different from the approach in type 3 and type 4 economies.

- Type 1 and 2 economies are fundamentally doing well. The focus of a LED intervention is at upgrading, i.e. strengthening the existing competitive advantage. A typical focus would address factor conditions, for instance addressing fragmentation among meso-level institutions in a type 1 economy or actually identifying and addressing the most pressing bottlenecks in a type 2 economy.

- Type 3 and 4 economies are fundamentally unwell. Here, the objective cannot be to grease a machine so that it can run at a quicker pace. Rather, the challenge is to initiate a process that leads to radical change in the local economy. In other words, these are the places where local actors need to design and implement a territorial change management processes that aims at radical change.



5 Conclusion: Potentials and limits of LED

LED is not only an option but actually a necessity in locations that are exposed to globalized competition. It offers a potential to upgrade the competitiveness of a location. As a consequence, agribusinesses from that location can strengthen their competitive advantage. Also, a location with a highly effective LED process will tend to attract external investors. LED can accelerate growth in a given location, and local stakeholders can manage LED in such a way that it benefits all groups in the location.

From the perspective of higher levels of government, LED's main advantage is that it permits more targeted delivery of services and targeted interventions. Local actors can define interventions according to the specific needs and circumstances of their location, whereas national programs tend to follow a one-size-fits-all logic.

Does LED work in all countries? No. It requires a certain degree of autonomy at the local level. There must be an incentive for local decision makers to concentrate on LED, which can be local democracy or local tax autonomy. If there are elected mayors and councilors, they will try to create jobs in order to raise their legitimacy. If local government derives taxes from local companies, it has a strong incentive to expand the local business sector.

LED also has its limits. LED cannot counter an unfavorable overall economic framework, for instance a restrictive fiscal policy at national level. It can only to some extent compensate for the lack or ineffectiveness of national developmental organizations. It is also rare to find LED interventions that are something like a "big push". LED leads to incremental upgrading and change in a location. It rarely achieves radical improvement in a short period of time.

Authors

Hayder Al-Bagdadi is team leader and technical adviser in the GTZ Regional Economic Development Programme in Central Java, Indonesia.

Cao Thanh Van (Ms.) is senior programme officer in the GTZ SME Development Programme in Vietnam.

Ljubomir Dimovski is a private business and value chain consultant in Skopje with his own consultancy company named Epicentar (www.epicentar.com.mk).

Ulrich Harmes-Liedtke is an LED consultant and trainer, and a co-founder and partner in mesopartner.

Jens Kallabiniski was team leader in the Lao - German Program Integrated Rural Development in Mountainous Areas of Northern Laos (RDMA) Sayabouri Province. He now works in Vietnam.

Carmen Langner is a consultant with GFA Consulting Group, Germany.

Harald Landauer is a consultant with GFA Consulting Group, Germany.

Ángel N. Matos Audén is an economic development consultant in the Dominican Republic.

Percy Barrio de Mendoza Vichez works in the Belgian Development Agency Project for Improving Agricultural Competitiveness to Reduce Poverty (PRODECO), Peru.

Jörg Meyer-Stamer is an LED consultant and trainer, and a co-founder and partner in mesopartner.

Colin Mitchell is a mesopartner associate and works as LED facilitator in South Africa.

Daniel S. Nugraha is technical adviser on agricultural issues in the GTZ Regional Economic Development Programme in Central Java, Indonesia.

Julia Anani Romainville Villasante works in the Belgian Development Agency Project for Improving Agricultural Competitiveness to Reduce Poverty (PRODECO), Peru.

Dirk Schulze is a consultant with GFA Consulting Group, Germany.

Yris Milagros Siesquien Chambergo is an economist and consultant in Peru.

Torsten Striepke is currently managing a GTZ project in Morocco.

Veronika Utz is SME adviser with the German Development Service in Laos.

Sanath Vidanagamage works with Swisscontact's LED project in Sri Lanka.