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## Reader: Pro-Poor Services in Value Chain Promotion



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## **I Contribution Three: Selected Parts from GTZ Interim Debriefing: Promotion of Private Sector Development in Agriculture, Kenya**

(Mathias Braun)

### **1. Approach of the Programme – Value Chain Development and related Services Approach**

The programme applies an adapted value chain development and related services approach. Focusing on improving currently highly fragmented and hence inefficient and intransparent business linkages in the local/national market (rural/urban), Private Sector Development in Agriculture (PSDA) supports value chain operators (producers, traders, processors and consumers) to better exploit existing opportunities for capturing better value at every node of the value chain. By doing so, the programme links its interventions to the agricultural value chain as a whole and gears support to market demands. Emphasis is on value addition on the levels of small scale farmers and local processors. It differs from classical value chain development, since it marries regional aspects with the subsector concentration on single value chains. This is due to the shortness of most chains (commodities for local markets), their de facto regional clustering and the follow up in the field by district government staff (DIT). Most services offered are also not specific to certain value chains (e.g. entrepreneurship training). This pragmatic approach reduces transaction costs and faces the realities in the field and of the commodities.

**Box I-1 The PSDA Approach – ideal-typical 4 steps from VC Analysis to VC Development**

**Phase 1 – (participatory) analyses, identification of VCs that merit assistance:**

- analyse performance and SWOT (strengths-weaknesses-opportunities-threats) including
  - (i) demand analyses as the starting point
  - (ii) supply analyses to assess the potential for competitiveness
  - (iii) value chain analyses to assess the potential for up-grading
- analyse stakeholders including
  - (i) micro level (VC operators like farmers, firms, consumers)
  - (ii) meso level (VC supporters like public / private service providers)
  - (iii) macro level (VC influencers like policy makers, administration)
- set-up impact monitoring system including
  - (i) building of hypothesis for impact monitoring
  - (ii) collection of baseline data for the impact monitoring

**Phase 2 – participatory VCD strategy and action planning, identification of VC specific approaches:**

- identify entry points for VCD
- identify facilitators for VCD
- elaborate a vision, organisation and management structure for VCD
- identify leverage points and needs for assistance
- identify leverage points where PSDA has got competitive advantages
- identify strategic partners for implementation
- validate hypothesis for impact monitoring

**Phase 3 – participatory VCD implementation, application and adaptation of concepts and instruments:**

- strengthen horizontal linkages (trust building, organisation and management structures etc.)
- promote vertical linkages (trust building, organisation and management structures etc.)
- strengthen other capacities:
  - (i) micro level (skills e.g. in production, processing, marketing, Farming as a Business - FaaB)
  - (ii) meso level (skills in VC related services)
  - (iii) macro level (change attitude viz VC related framework conditions)

**Phase 4 – participatory impact monitoring, feedback and VCD strategy refinement:**

- monitor impact and adapt VCD strategy and action plan as required
- analyse lessons learnt and develop best practices

The selection of chains and regions was prepared by extensive base-line surveys. These will be the basis for impact monitoring as well. The originally nine chains for promotion were chosen in a national stakeholder workshop (government, GTZ, other donors), using a decision matrix with qualitative information from the base line surveys. Field implementation started with key stakeholder meetings on selected commodities and the drafting of initial chain maps (kick-off workshop for participatory chain and performance analysis, strategy and action planning). Invited were mostly partners from the public sector and members from associations (where already existing) or existing/emerging interest groups. Invitations were usually organised by the District Agricultural Offices (now DITs). The workshop proper was moderated by programme staff (Value Chain Manager). The chain mapping, the joint identification of bottlenecks and resulting action plans can be considered as the key for initialising linkages to producer/processor groups and other public and private partners at the national and/or district levels.

Following the kick-off workshops, quick-start projects were implemented to gain the commitment of stakeholders and further in-depth analyses was carried out to fill information gaps identified in the value chain mapping exercises, such as analysis of demand structures and trends (e.g. mushrooms, dairy goats), structure, quality and quantities of raw material supply for the processing industry (e.g. mangoes), constraints and opportunities in market linkage development (e.g. poultry), constraints and opportunities to assure quality and improve economic performance in export tree crops (e.g. passion fruit). In a next step, workshops with a more general participation of stakeholders at national level were organized in selected VCs to create broader awareness and commitment for value chain development. During these workshops, key findings of the analyses and quick start projects were presented, participatory refining of the chain map facilitated (including identification of constraints, opportunities and leverage points), VCD strategies further refined, the way forward agreed upon and VCD Coordination Committees formed.

All further interventions (participatory implementation on all levels; participatory concept development and replication after evaluation) are linked to the results of the chain mapping. Programme staff was qualified for value chain development by GTZ in a course in Germany and a regional SNRD training; district staff received an adapted training in a roll out exercise. The staff is regularly backstopped by a consultant (GFA). The potato value chain, in which staff had most previous experience, served as a role model for all other VCDs. The basic design of the value chain development appears to be very professional, efficient and transparent. It allows the linkage of other components, without losing the direction. It needs well qualified staff though. Having gained experience in two to three years (mainly on-the-job) training, the programme staff is very confident about their qualification. For out-scaling the

programme's approach, a concept has now to be developed to transfer their theoretical knowledge and hands-on experiences to the emerging DITs and selected service providers at national and district levels.

Action plans from the chain mapping determined the further interventions: these include basic training in commodity specific "Farming as a Business" (FaaB, conducted by ATC), special technical training on demand, organisational development for the consolidation of farmer groups (formation, leadership) and associations (organisational structure, membership policies/management, service development/management etc.), matchmaking workshops with traders and/or processors and activities in HIV/AIDS mainstreaming (awareness). Service provision was mostly outsourced to existing (KARI (public), KENFAP (private) and others) and emerging providers (ATC, AfriCert; biogas consultant companies); the latter were supported to develop sustainable organisational structures (business planning; OD; development of portfolio, qualification). The chain mapping indicated the priority targets for policy development: it resulted in a new potato policy (with legal instruments) and draft regulations for milk, fisheries and inputs. The 9 supported PPPs (commodities, processing, embedded services by input dealers, HIV/ AIDS mainstreaming), partly complement the development of the existing value chains.

As a whole, the programme's approach is pragmatic, adaptable and still keeps all the advantages of a comprehensive concept (clear development direction, proven tools, innovative product). Sustainability can be achieved with the approach by strengthening farmers and processors groups/commodity associations (member-orientation, service offer and representation), improvement of transactions/linkages through capacity- and trust-building and introduction of innovations in the chain to improve competitiveness and the creation of qualified, demand driven service providers of the private sector and the civil society. The role of the government will then be more of a moderating and regulating type that sets and controls the framework conditions.

## **2. Impact**

The base line surveys yielded data for the ex ante situation of the value chains. For innovations, like stoves and biogas, special surveys were undertaken. Data taken during chain mapping and the implementation of the action plans complement the picture.

Impact has been measured so far mostly on the "user" and "use" levels. Main direct impact has been on the degree of self-organisation and representation of farmers (organised groups, registered associations, KENFAP), a better chain governance (organisation, matchmaking), improvement in

productivity (technical innovations, access to inputs, processing, biogas), creation of value addition (processing, biogas) and better framework conditions (policies and regulations). The author could not get a full picture of the numbers of farmers involved in training and other services for each value chain, since the activity or process monitoring is not yet fully implemented. Anecdotal evidence from the potato chain and the related association (KPG&MA, since 1 March 2006 KENAPOFA), the largest and “oldest”, show that from the roughly 500.000 organised potato farmers, about 30% are reached indirectly and 1500 directly (30 groups); they could improve their income through technical advice and new standard potato bags by 20 – 50%; the association was actively involved in the drafting of the potato policy that prescribed the new bags. Another example is the support to EurepGAP certification (certification handbook) that kept directly more than 300 small-scale export farmers in the profitable business. For the evaluation in early 2007, a more complete set of data will be necessary to underpin the manifold impact on productivity and farm income for a large number of farmers. The extent of the direct impact will allow attribution to the growth of the sector as a whole.

## **2.1 In depth interviews**

The present debriefing focuses on three elements of the overall PSDA approach as described in chapter one, namely Phase 3 – participatory VCD implementation:

- promote vertical linkages:
  - improve quality assurance for exports through EurepGAP certification
- strengthen horizontal linkages:
  - facilitate the further development of the organisation and management structures of KENFAP (Kenya National Federation of Agricultural Producers)
- strengthen other capacities (see chapter 2.1.1):
  - (i) micro level (skills in Farming as a Business - FaaB)
  - (ii) meso level (skills in VC related training services)

### **2.1.1 Training in value chains**

Training activities in the selected value chains are the outcome of the first steps in the VCD cycle, i.e. participatory chain mapping and resulting specific action plan. Training requirements are identified and agreed upon there. The generic training modules include technical and economic subjects for VC operators (micro level) like OD/group formation (including legal provisions related to formalising groups into associations, cooperatives, or companies, leadership training, service development, financial management etc.), entrepreneurship training or for VC service providers (meso level) like

Training of Trainers (ToT) in OD, FaaB and participatory extension planning (PEP). The requirements for training are formulated by the resp. PSDA VC Manager and transferred to the Training Manager, who writes the ToRs for the training institution. The necessary profile of trainees is transferred by the VC Manager to the groups (established routine procedure). Service providers are mainly ATC (training in Farming as a business, group OD, business planning, PEP) and KENFAP (advice on OD and legal issues of farmer groups and commodity associations, PEP) as well as the District staff (MoA, MoLDF, MoCDM), PSDA programme staff and selected NGOs/private sector organisations (VIMPRO, DRUMNET, LISSA) for technical issues; consultants do leadership training and training in environmental technologies. The interviews concentrated on ATC (Agricultural Training Centre).

ATC is the commercial services branch of the Cooperative College of Kenya (COCK) and currently in the process of being registered as a company with shares owned by COCK (business plan, code of conduct). The triggers for privatisation were decreasing budget allocations to COCK and the threat of total privatisation; these made the generation of income vital for the college. ATC has a small core staff, including one expert from DED and an own infra-structure. Main assets of ATC are the training module on FaaB, adapted from a Ugandan version (ACDI/VOCA), as well as modules on OD for farmer groups, entrepreneurship and business management/ planning, marketing for associations, microfinance and training of trainers in methodologies (portfolio). In the process of development are short courses for associations/ cooperatives, a “legal clinic” for financial management in co-operatives and on human rights. ATC has a pool of trainers, mostly from outside the college, experienced in training and who can speak the various languages in Kenya. They have standard rates for conducting courses. The established courses have a basic trainers manual with lesson plan and material, as well as material for the trainees; the courses are then adapted to the needs of the customer. The courses were developed with support from Hans Seidel Foundation, ACDI/VOCA Kenya as well as PSDA (manual FaaB and OD, with GfA). Manuals for training of VCD facilitators and marketing are currently under preparation (supported by PSDA/n GfA). The key courses for PSDA are FaaB to train farmers in business orientation and OD for farmer groups; ATC trains about 1200 trainees per year in FaaB; all supported groups/associations have to go through the 6 days OD training – the contents are tailored to the commodity, but include generic topics on group formation and entrepreneurial vision as well. Extensionists from the districts (future DITs) usually are part of the training. The course ends with individual implementation agreements signed by each trainee. Post-training monitoring of the course is done by District staff and the VC Manager. The training evaluations show a high degree of relevance of the trainings (> 80% of trainees) and confirm the professionalism of most trainers.

Assessment: The trainings fit very well into the VC development cycle, provided the chain mapping was done properly (participatory, prioritisation of the right issues; commitment by groups). The training topics seem very relevant for the development of market-oriented producers – both FaaB and OD of farmer groups appear fundamental; a six days course does not seem to be too long to the author for such basic reorientation. Although, there is a need to adapt the training period and venue to the specific needs of female participants (close to their location and sufficient time allocation for household duties). The training manual for FaaB looks sufficient – some improvements on the evaluation of trainings were pointed out. The author thinks though that the adult education methodology could be improved and more emphasis put on the development of an entrepreneurial vision by the trainees. The implementation agreements with trainees seem to be a very good idea to improve commitment. The presence of extension staff at the trainings should make follow-up easier and lead to better understanding of the situation of farmers. The coaching of groups after the training is apparently not as close as it should be. The follow up on action plans concerning OD is quite successful; the one on managerial issues should be improved. Communication of the PSDA approach to VCD between the programme and partner service providers (District MoA, MoLFD, MoCDM, ATC trainers and KENFAP regional staff specifically) and further selected service NGOs and companies need to be improved to facilitate the understanding of the implications of the VC development approach. In view of rolling out the approach at district and local levels, capacities of these service providers (private, public, NGO) in VCD need to be built. ATC voiced the interest to understand the VC development concept of PSDA better to improve on their courses and to be involved in the follow-up. Regular meetings of the main service providers with the programme could improve quality of services (supervision group). The outsourcing of training activities by PSDA to emerging, flexible operators is a cornerstone in the creation of sustainable services to producers.

Lessons learnt: ATC: The recent restructuring of the parastatal (COCK) triggered the development of a training company (ATC) for income generation. The establishment of a training company required legal clarification, enough business/customers from the start, readymade modules that can be customised and flexibility to do training in remote places. Product development with intermittent visits by external consultants was taking a long time. Most COCK trainers are not suitable for farmers trainings – trainers need to be selected from different organisations.

Training: The chain mapping exercise is the right forum for the identification of training needs (representative, relevant); unrealistic demands can be clarified. Farmers groups need to have a minimum of stability before they receive technical and/or entrepreneurship training. The OD training fills this gap. Structured procedures in the preparation, implementation and follow-up of trainings, as

introduced through the PSDA training concept, improve efficiency. Training venues should be accessible for trainers and be conducive to learning. It is necessary to clarify training content and objectives before the training. Trainers need to speak the vernacular language of the area to be efficient – English and even Kiswahili are not enough. The “eye-openers” for farmers in the FaaB course were: traditional farming can be a loss making business, record keeping is necessary to detect and correct losses and group formation reduces costs for inputs and makes marketing more profitable, provided the joint activities are based on trust and strong group cohesion. The introduction of implementation agreements between PSDA and the trainees makes the relationship more binding. The evaluations, including the one between trainers, help in improving the courses. After basic training, the shift in value chain interventions needs to be on coaching (i.e. assisting trainees to translate theory into daily work routine). Trainable producers get the necessary skills in the courses and sometimes become trainers themselves. There needs to be a time horizon of several years for a farmers group to go through the full cycle of VC development and internalise new attitudes and skills. These business and organisational skills empower producers and hence facilitate their integration into value chains. Further need for capacity building though emerges along the value chain, which needs to be addressed in future.

### 2.1.2 Support to EurepGAP Certification

Crisis: Kenya has a long tradition of smallholder horticultural export farming, especially in French beans (“Kenya Beans”). The export is done through individual large export companies. The issue of EurepGAP certified production for the European high end markets became pressing in 07/2004, when some supermarkets demanded certification of Kanyan produce by 01/2005 (crisis). The MoA asked PSDA to clarify the situation on certification requirements by 08/2004 (link to GTZ sector project “Agricultural Trade”). The exporters were neither willing to support their small scale suppliers in certification nor to pay a premium for certified beans. The exporters instead started to produce by themselves or to organise out grower schemes to a small extent. This situation was threatening the business of the small scale producers, leading to a number farmers opting out. Following the decrease of supplies from Kenya in combination with decreasing supplies from other countries (mainly Côte d'Ivoire and Senegal), this led to a shortage of beans on the export market and non-certified beans were still accepted by European retailers. This in turn resulted in a loss of credibility of the EurepGAP scheme among Kenyan farmers. The two options for EurepGAP certification are: individual (option 1) or group certification (option 2); the latter is cheaper for the individual farmer, but requires either certification under an out grower scheme with the exporter as owner of the certificate or a strict internal quality management of the group with the group owning the certificate jointly and hence the precondition of enough group cohesion.

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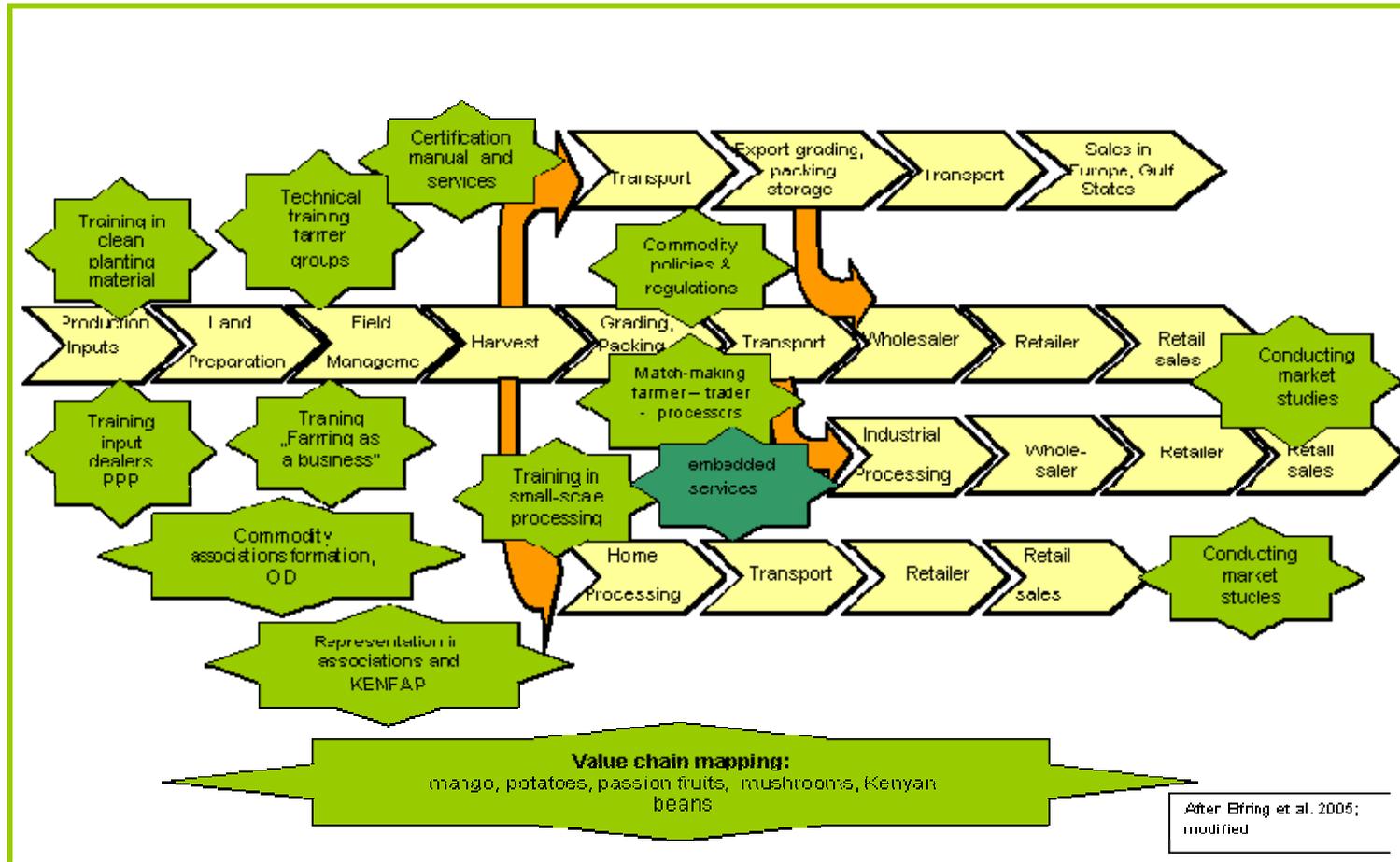
Actors: The Kenya Business Development Service Programme (KBDS/USAID) and the Business Services Market Development Programme (BSMDP/DfID) were developing Kenya specific good agricultural practices (Kenya GAPs) in a Horticultural Task Force together with the Fresh Produce Exporters Association of Kenya (FPEAK). BSMDP/DfID was also working with small-holders on individual certification and supported AfriCert in cooperation with the International Centre of Insect Physiology and Ecology (ICIPE) and GTZ to create a regional certification body. BSMDP was looking for a partner in option 2 certification. At the same time, the GTZ Sector Project “Agricultural Trade” was developing a generic certification manual for option 2 smallholder group certification under EurepGAP.

Activities: Initially, export crops were not selected from the baseline surveys (12/03), since they were viewed as being sufficiently supported. At the beginning of the crisis (08/04), PSDA started to organise awareness creation and training courses in EUREPGAP requirements for extension agents and farmer groups. The activities to develop the manual on group certification (option two) as “shareware” together with DfID started in 05/05; following a proposal by the sector project “Agricultural Trade”. A Memorandum of Understanding was signed in 09/05; the partners were GTZ Sector Project, PSDA, DfID and the consultancy firm carrying out the business market services programme; MOA extension was not accepted by DfID as a partner. Implementation started in 10/05 with a workshop where the draft manual was presented; training of nine farmer groups (30 members each) in good agricultural practices, option two certification, Farming as a Business, and group development started in 12/05; the generic manual was commented by the consultants in 01/06 and changes were introduced by GTZ in 02/06; the finalised draft is still with GTZ Heat Quarters. Until now seven groups are certified by AfriCert, one group disintegrated, one group is still pending. Main problems in the approach were group cohesion, poor relationships with exporters and record keeping by the groups.

Assessment: export certification requirements are a well known obstacle for small scale farmers to remain in, or to enter high end markets. Costly individual certification is an additional obstacle. The experience of GTZ with EUREPGAP certification and the generic certification manual for option two were a unique early advantage over the established development actors in the field. The memorandum formalised the cooperation between different development partners, made the field testing of the smallholder group certification manual possible, created business for the start-up certification company AfriCert and kept so far seven farmer groups in business. It may thus be considered as a win-win situation since the basics for certification of small scale farmers were created in a relatively short time. Supporting scaling-up of group certification needs to be continued.

Lessons learnt: the crisis made export farmers keen to go through the difficult process of group certification; the combination of the manual with the training course on Farming as a Business plus organisational development were essential for the success. With respect to technical capacities, record keeping was the main difficulty for farmers – here the training course was most helpful. Young farmers could be employed for record keeping of groups. The language of the certification manual needs to be simplified, in order to be understood by farmers. The work with groups reduced transaction costs of training and for certification. Regular follow-up by either EurepGAP trainers, exporters (in form of embedded services) or qualified extension staff is needed after the certification to maintain the standards. The cooperation between farmers and exporters (VC approach!) needs to be sought at an early stage, in order to build trust and a common understanding. The double standards by some exporters (mixing certified with non certified beans) undermine the trust of farmers in the process. The cooperation with the GTZ sector project was vital for the development of the component (manual, external information).

Box I-2 Generic Value Chain, Crops, Kenya - PSDA Intervention Areas



## II Contribution Four: Transaction costs. Knowledge management, learning and communication in value chains: A case analysis of the speciality coffee value chain of FAPECAFES, Ecuador.

(Reinhild Bode)

### 1. Approach and development of FAPECAFES

The regional federation of the ecological farmers' organization FAPECAFES was founded in 2002 in order to commercialise coffee of four smallholder farmers' organizations, which are localized in three departments in the southern highlands of Ecuador. Coffee production has a long historical trajectory in this region and was introduced from the coastal province of Manabí after 1830. The object of the integration of the four organizations and the development of an umbrella organization was to improve efficiency and competitiveness at national and international level through increased volumes and higher quality of their produce. Environmental conservation is a second focus of FAPECAFES.

The value chain of FAPECAFES shows a dynamic process of increasing vertical integration and product differentiation during the last decades. At present, FAPECAFES offers a range of products from organic certified, Fairtrade certified, combined organic and Fairtrade certified coffee as well as uncertified, conventional coffee and a small segment of high quality coffee. A special brand for the local and national market has been developed and launched successfully.

Communication and knowledge management became an important issue in FAPECAFES, when in 2005 the expected volumes of exportable coffee were over-estimated and due to the beforehand negotiated contracts too much coffee was sold, which caused trouble with FAPECAFES's buyers.

In short, what happened? Missing rainfalls during the months, which are critical for the development of the cherry, provoked a deficit and unequal maturing of the fruit, originating small and unequally ripe beans. This led to elevated pulping and processing costs. As local prices for unprocessed dried cherries were favourable in 2005, lots of farmers sold a considerable part of their produce to the local middlemen instead of to their organization (the so-called "escape of coffee"). From the expected 14.600 qq of washed Arabica, estimated in April 2004, arrived only 9.298 qq at the warehouse, which is only 64 %. On the other hand, FAPECAFES had made a big effort to negotiate higher volumes with their clients as well as to negotiate increased credits with their creditors so that the produce could be purchased. Hence, the expectation of high yields faced the reality of a bad harvest. In order to comply at least with most of the agreed export volumes, FAPECAFES started to buy coffee from other

organizations in the region, recovering about 455 qq, and trying to renegotiate contracts with their clients. Finally a debt of 2.000 qq remained, expected to be paid off with the next harvest.

This was the starting point of a serious reflection about how to communicate and coordinate more effectively within FAPECAFES, although the problem probably originated long before. Studies was conducted in order to understand FAPECAFES' internal communication and knowledge management practices as well as to define activities for overcoming the problems. Within this context, the available study was carried out. The estimated transaction costs for a small-scale coffee growers' association will be presented within the next chapters.

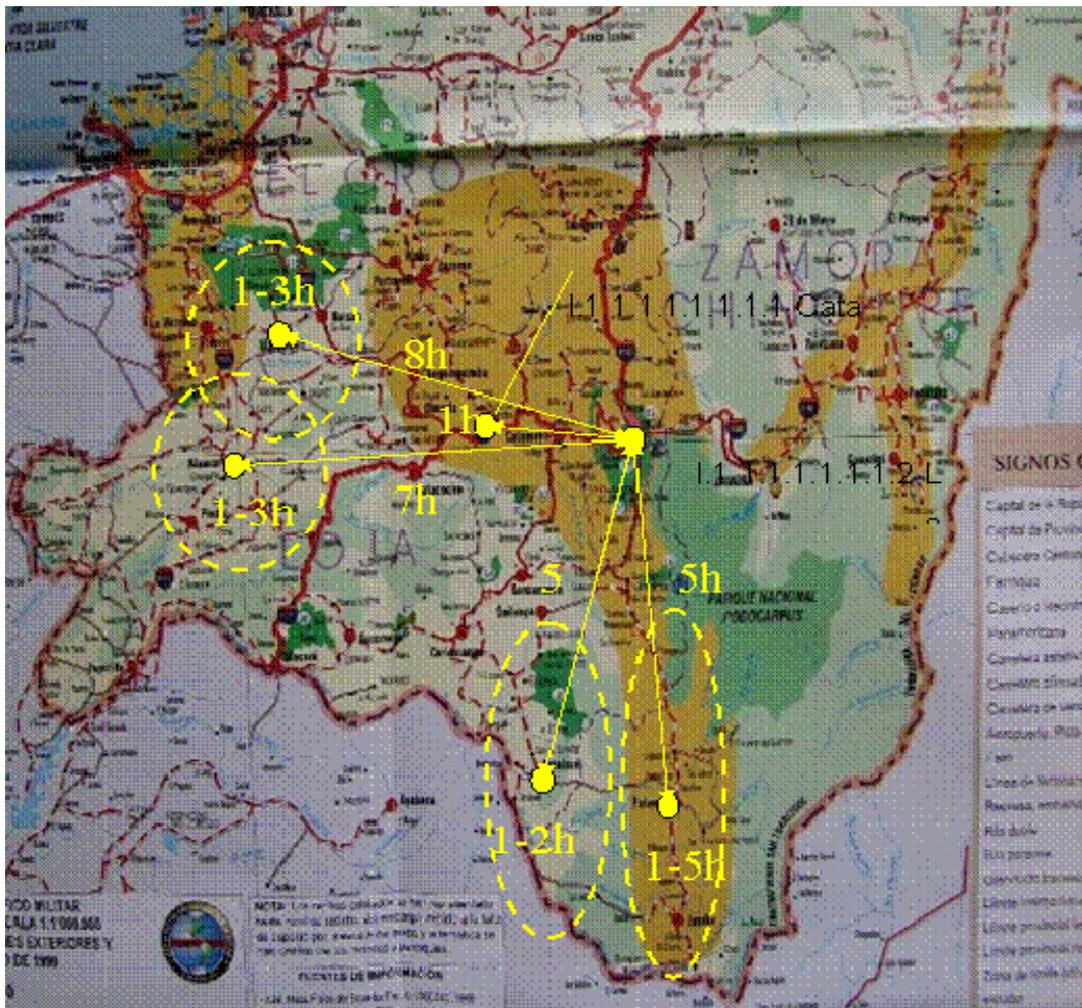
## **2. Transaction and Opportunity costs analysis**

A rough analysis of the transaction and opportunity costs in FAPECAFES and one of its associations has been realized in order to calculate the additional costs of an improved information and knowledge management system of FAPECAFES and its sustainability. First, the geographical distances between the different production zones will be described. The next chapter provides a quantification of the costs of transactions needed to transfer information and knowledge between the different organizational levels of FAPECAFES and its grassroots. Chapter 2.3 gives an overview about the costs, resulting from the development of new medias and the staff required to improve the internal communication flows. The development of media was one of the activities of the participatory action plan, which has been developed within the context of this study. Perceptions of different members of FAPECAFES regarding the benefits of the medias used have been surveyed during a monitoring and evaluation process and proposals for the improvement of the strategy used have been developed (chapter 2.4).

## 2.1 Geographical distances

FAPECAFES is buying coffee from four associations<sup>1</sup>, which are scattered over three different provinces in the southern highlands of Ecuador. Map in Box V-1 visualizes the geographical distances between FAPECAFES and its associations.

### Box II-1 Geographical distances between FAPECAFES and its associations



As transportation and communication infrastructure is still poor, long journeys are usual in order to make any transactions or getting access to services: from Loja to the associations' headquarter, mostly based in the province capital, are about 5 – 10 hours bus drive, generating costs between 5

<sup>1</sup> A new association, called APEOCAE, which recently has been affiliated and is now exporting via FAPECAFES, could not be considered within this study.

and 10 USD<sup>2</sup>. From the associations headquarter to the different farms are about 1-5 hours using any transportation media: bus, local “chiva”, pick-up, motorbike, donkeys or on foot. Especially during the rainy season transport is often hampered due to heavy landslides and destroyed bridges<sup>3</sup>. At the capitals’ level, phone boxes with national and international connections exist, as well as providers of mobile phones and internet services. However, connectivity decreases rapidly with increasing geographic distance within the rural areas, where the isolated farms are widespread. The associations mostly possess poor communication means: APECAP has one telephone line and can only use the Municipality’s internet access. PROCAP is at the moment totally disconnected, as the office and warehouse moved and still wait for new lines. The only outside connection is the mobile phone of one of the staff members or the public phone boxes, about 15 minutes walk from the office, which affects a fluent and bilateral communication.

Problematic is also the missing connectivity of the central warehouse and laboratory, where coffee quality is assessed, samples are prepared for the clients and bags are prepared for export. Since half a year the warehouse and quality control manager is waiting for a telephone line and internet connection in order to be able to communicate directly with the general director and the clients.

## **2.2 Transaction and opportunity costs**

Transaction costs - as used in this study - are understood as all the costs, generated by organizational and communicative actions. Hence, they include telephone and internet costs as well as the costs of all meetings and assemblies held at the different levels of the federation: mobilization to the place of meetings, alimentation, and accommodation of the participating members as well as the remuneration of frequently travelling staff, which represent the opportunity costs of the working day.

At the moment, these costs of organization at the level of FAPECAFES, add up to 10.732 USD in 2006, which is equivalent to **1,15 USD/qq** (calculated on the base of 9.250 qq coffee exported). These costs represent about 21% of the administration costs and about 7% of the total costs (which include the exportation process, administration, certification and interest = 17,05 USD/qq in 2006).

In addition to the costs at FAPECAFES’ level, each association has its own transaction costs for the internal meetings and field trips (not including the technical assistance!). In the case of APECAP these costs add up to 5.393 USD in 2006, which is equivalent to **0,504 USD/qq**. These costs represent about 28% of APECAP’s administration costs and about 11,5 % of the total costs at the associations’ level (including transportation, administration and interests = 4,39 USD/qq in 2006), (see annex 3).

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<sup>2</sup> The minimum loan for one working day is between 6 and 8 USD/day (=8 hours).

<sup>3</sup> During my fieldtrip in April 2006, about 50 landslides blocked the road between Loja and Zumba and stopped any traffic for 5 days.

The transaction costs considered by FAPECAFES and the associations don't cover the opportunity costs of farmers, joining the regular meetings of their groups (bi-monthly) and of the general assembly (once a year), nor do they regard the opportunity costs of the group's leaders, who additionally have to assist the Coffee Committee (bi-monthly). Hence, a normal member has to invest 7 and a leader 13 working days, which represent if capitalized with 7 USD/day<sup>4</sup> a cost of 49 and 91 USD/year respectively. A farmer, who produces 10 qq/ha, will have a yearly net income of about 525,60 USD (organic fair-trade coffee) or 375,60 USD (conventional fair-trade coffee)<sup>5</sup>. Consequently he has to invest 9 % (O+FT) and accordingly 13 % (FT) of his net income as a normal member in order to assist the regular meetings and 17% (O+FT) and accordingly 24% (FT) as a leader. However, productivity of most farmers is lower than 10 qq/ha, as coffee plantations are overage and investments in renovations are low (due to difficult access to credits and little motivation of farmers). With a productivity of 5 qq/ha a farmer will have a yearly net income of about 262,80 USD (organic fair-trade coffee) or 187,80 USD (conventional fair-trade coffee) and hence, he has to invest 19 % (O+FT) and accordingly 26 % (FT) as a normal member and 35 % (O+FT) and accordingly 48 % (FT) as a leader.

Unfortunately, data about the number of has with coffee production and productivity of each farmer is not available. Data about volumes are accessible in APECAP: the average volume per member of all the 18 grassroots groups delivered to the local warehouse in 2005 was 16,89 qq, with a minimum average of 4,39 qq/member in one group and up to a maximum average of 43,6 qq/member in another group. The lowest volume delivered by individual members was less than 1 qq while the highest volume delivered was up to 140 qq.

### **2.3 Costs of medias and communication team**

In 2006 FAPECAFES decided to improve their communication and information system and started to develop different activities in order to improve the internal communication as a first step. Different medias have been developed and used to improve the communication between the farmers' associations and the regional federation FAPECAFES: a newsletter with up-to-date information about prices, volumes exported, clients, decisions of the director's board etc. is diffused bi-monthly to the associations and the farmers' groups. In each of the associations commercial alliances with radio stations have been constructed, which broadcast information to the farmers. Didactical material like

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<sup>4</sup> An 8 hours working day (= "jornal") of a labourer can be calculated between 6 and 8 USD/day.

<sup>5</sup> Calculated with average prices of 139 USD/qq (organic fair-trade) and 124 USD/qq (conventional fair-trade), considering exportation and organizational costs of 17,05 USD/qq for FAPECAFES and 4,39 USD/qq for the association and relatively low production costs of 65 USD/qq, based on estimations of the Federation's president.

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flyers and booklets with information on the production and post-harvest process have been designed and distributed.

All these costs would more than double FAPECAFES' transaction costs, amounting to 14.250 USD/year, which is equivalent to **1,54 USD/qq**, (see Box V-2).

**Box II-2 Costs of media and communicators in FAPECAFES (2006)**

<b>Media</b>	<b>Individual costs [USD/unit]</b>	<b>Total costs [USD/year]</b>
<b>1. Radio</b>		
<b>Frequency of diffusion: 2x/month ½ hour</b>		
	[USD/month]	[USD/year]
Radio Integración	44,80	537,60
Radio San Antonio	57,70	692,40
Radio Mix	56,00	672,00
Radio La Mejor	112,00	1.344,00
<b>Subtotal:</b>	<b>270,50</b>	<b>3.246,00</b>
<b>2. Newsletter</b>		
<b>Frequency and volumes: 1.500 samples, bi-monthly</b>		
1. Design	200,00	200,00
2. Design	150,00	750,00
Print	436,00	2.616,00
Transport Quito-Loja	8,00	48,00
<b>Subtotal:</b>	<b>794,00</b>	<b>3.614,00</b>
<b>3. Flyer</b>		
<b>Frequency and volumes: 1.500 ejemplares, unique</b>		
Design and print	274,00	274,00
<b>4. Staff for communication</b>		
<b>Communicator FAPECAFES</b>	273,00	3.276,00
<b>Communicators of 4 associations</b>	80,00	3.840,00
<b>TOTAL</b>	<b>1.691,50</b>	<b>14.250,00</b>

## **2.4 Costs of quality and price differentiation**

The proposed changes in the quality related communication and information flows along the chain imply also increments of costs, which at the moment can't be quantified satisfactorily. According to the local warehouse manager, workload is doubling as he has not only to receive and weight the coffee bags, but also to do quality control in a more detailed way than before, including humidity measure, identification of green beans and defects, which is time-consuming as samples have to be milled and roasted. As farmers are used to deliver relatively small amounts of coffee during the harvest time with varying quality, quality control tends to slow down the whole process and additional staff is needed in the warehouse<sup>6</sup>. Any costs exceeding the actual rate of 5,39 USD/qq, to cover the increased working time of the local warehouse manager and additional staff, are difficult to justify as long as the market does not provide economic incentives for improved quality (the price differentiation scheme realized at the moment is an internal agreement between APECAP and FAPECAFES). Direct conversations with the buyers are needed in order to get a common understanding of the situation and renegotiate contracts.

## **2.5 Perceptions of benefits of media used and quality and price differentiation**

Regarding the total costs of 21,44 USD/qq (plus 1,54 USD/qq) to be paid by each farmer (calculated on the base of the expected volumes and prices for 2006) and taking into account an average price between 124 USD/qq (conventional Fairtrade) and 139 USD/qq (organic Fairtrade), it must be questioned if the additional transaction costs can be justified and may be auto-financed at any time. On the other hand, it is very difficult to quantify the benefits of an improved information and communication system.

In general, the perceptions of farmers, technical staff and directors regarding the use of media can be summed up as follows:

- The information diffused by the newsletters and the radio attracts new members, who want to join the organization. Actual members have better access to information about FAPECAFES, markets, prices, quality requirements etc.
- A good moment for discussions and exchange of opinions about the information within the newsletter is the local warehouse, where farmers deliver their produce and wait for the quality control results.

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<sup>6</sup> Calculated with data of 2005, 233 members of APECAP have an average of 2 to 11 deliveries of coffee bags during the harvest time. Taking into an account a total average of 5 deliveries and supposing that each sample will be checked, the warehouse manager must do the quality control of a total of 1165 samples. Each sample requires about 15 min., which means 291 working hours or 36 whole working days. At the moment the three warehouse manager receive each about 500 USD for the whole harvest time.

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- Especially the radio program seems to fit farmers' interests, as topics of their interests (like soil conservation methodologies) are diffused.
- On the other hand farmers claimed that the information distributed has been centred on FAPECAFES and does not include farmers' experiences and needs. It seems that too much focus has been put on the media instead of on the message.
- In general, written medias are more difficult to use and culturally inadequate, as farmers are not used to read. Hence, the distribution of the newsletter (as well as any other information from the directors' board) must be improved, which challenges the facilitation skills of the farmers' groups' leaders.

However, not convincing coffee prices combined with low productivity, loose social relations due to the migration process in the southern highlands and increasing interventions of intermediaries offering relatively high prices for unprocessed dried coffee, seem to weaken the groups' cohesion and thwart any communication strategy. In any case, the actual strategy must be adopted and a reduction of costs should be aspired in order to achieve financial sustainability. As discussed with FAPECAFES and cooperating partners, improving the efficiency of the existing communication and information system is dealing with attitudinal changes of people and is much more about clarification of roles and functions than about technology or media.

Regarding the quality and price differentiation policy, most farmers and technical staff expressed, that

- Farmers are more motivated to deliver good quality, pay more attention to their work and are more responsible with their organization.
- Quality control results give good hints for the orientation provided by the technical staff.
- The feedback of the quality control results to the farmers and the technical staff still suffers logistical problems and will be facilitated by a software, which links different information sources (like credits handed out, volumes and quality delivered per member).

However, the benefits expected – improved coffee quality rewarded by higher prices – must be evaluated later on. These benefits should more than exceed the additional costs generated by the increased workload of the warehouse manager.

### 3. Assessment of transaction and opportunity costs

In order to assess the transaction and opportunity costs of FAPECAFES, the following data and information served as inputs:

- Calculation of the annual budget of FAPECAFES (2006)
- Calculation of the annual budget of the association APECAP (2006)
- Geographic distances between the capitals of the different regions, which FAPECAFES integrates, and average distances from local capitals to farms.

In order to assess the costs, caused by an “improved information and knowledge management system”, the costs of the media introduced and the communication team were analysed.

$$\Delta \text{ Transaction costs} = \sum \text{ Communication costs} + \text{ Organizational costs} + \text{ Opportunity costs 1}$$

$$\Delta \text{ Communication costs} = \sum \left( \text{Telephone and internet} + \text{Electricity} \right)$$

$$\Delta \text{ Organizational costs} = \sum \left( \text{Mobilization} + \text{Alimentation} + \text{Accomodation} + \text{(Remuneration)*} \right)$$

of meetings at FAPECAFES' level (Directors' board, General Assembly, travels of president)

\* Unfortunately the available budgets do not always cifferentiate strictly between remuneration and other costs of organization.

$$\Delta \text{ Opportunity costs 2} = \sum \left( \text{Costs of lost working days***, non-remunerated} \right)$$

\*\*\* capitalized with 7 USD/day.

In order to understand, how much the non-remunerated opportunity costs affect farmers, they were calculated as the % of the total net income (differentiated according to productivity, coffee quality (organic / conventional coffee) and position of farmer (normal member / leader)).

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