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Participatory Action Research on marketing fresh litchi with ethnic minority farmers in Thai Highlands

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Introduction

This study offers a basis for understanding innovation processes, both technical and socio-organizational, emerging from cooperative efforts between a group of marginalized small landholders of Hmong ethnic minority, an academics group and a large supermarket chain, together involved for the first time in a three-month risk- and benefit-sharing marketing venture.

The prevalence of litchi orchards on hillsides of Mae Sa Watershed, located in Chiang Mai province in the North of Thailand, makes small landholders vulnerable to price fluctuations. In the absence of a Hmong farmers' marketing cooperative, most fresh litchi, a high value crop, is traded via middlemen who keep farm-gate prices low as many marginalized Hmong farmers have little marketing skills. Equally, lowlands' Thais prejudices¹ on so-called 'hilltribes', high perishability of fresh litchi fruits and failure to meet market demands on proper agricultural practices² and food safety standards significantly narrow Hmong growers' marketing options. Reduced profit margins³, forced some growers to convert part of their orchards into vegetables fields. This conversion threatens the agro-ecosystems in the valley as vegetables are not as effective in limiting soil erosion on steep lands as are litchi orchards, which best replicate the conditions of forest cover. Steady fall in prices, coupled with the little bargaining power of Hmong farmers and the trend of cutting down litchi orchards, prompted academics from the Uplands Program⁴ (*Uplands*) and two institutes⁵ (*Institutes*) from Chiang Mai University to invite Hmong litchi growers to initiate talks with a large supermarket chain (*LSC*). The Uplands Program is a research program that aims to improve the socioeconomic conditions of the highland communities and to minimize environmental impacts. The two invited institutes from Chiang Mai University, Thailand, are collaborating on a value chain project to export fresh fruits from Asian regions to the European market. The large European-based supermarket chain has more than 400 branches across Thailand and aims to buy directly from producers' groups. Its organizational structure is greatly departmentalized and hierarchical: each representative has defined responsibilities and influence within established protocols and sectors.

¹ As an example of socio-cultural segregation, Hmong litchi growers of Mae Sa Watershed receive fewer training workshops by agricultural extension officers than Thai litchi producers in lowlands' areas (Neef *et al.*, 2006).

² Farmers have requested guidance to properly use safe agrochemicals and effective biological control methods.

³ Since 2001, the average price remains close to the production cost of 15 Baht (0.30 €) per kg (OAE, Thailand).

⁴ The Uplands Program is a Thai-Vietnamese-German collaborative research program on "Sustainable land use and rural development in mountainous regions of Southeast Asia" initiated in 2000 by the University of Hohenheim.

⁵ Institute of Science and Technology (IST) and Postharvest Technology Institute (PHTI), Chiang Mai, Thailand.

Participatory Action Research and innovation processes

Through semi-structured interviews, participant observation and descriptive data collection, the continuous adjustments of the stakeholders' efforts in networking and making sound decisions are captured to analyze the how and why of the organizational outcomes of the marketing venture. The flexibility and iterative process of the Participatory Action Research (PAR) approach facilitate the understanding of complex and dynamic social processes occurring in the adoption of innovations⁶ (Engel, 1997). In addition, PAR holds the potential to capacitate marginalized Hmong farmers in marketing their produce and their active involvement better guarantee the sustainability of the adopted innovations (World Bank, 2006). Diffusion of innovations is the process by which new practices and forms of co-ordination emerge from joint learning and negotiation between partners (Rogers, 1995). As the marketing environment displays high levels of uncertainty and multiple interactions between actors (Carson *et al.*, 2001), qualitative approaches suit best the analysis of context-specific processes of partnerships, decision-making and implementation of actions.

Dynamic adjustments in elaborating a common marketing plan

Three consecutive marketing plans were developed: selling directly to a Large Supermarket Chain (LSC), airfreight to southern provinces, and selling through a vendor⁷. Figure 1 shows the three arrangements of partners upon reaching a stable marketing plan. To simplify the complexity of the innovation processes, the constructed diagrams consider each partner as a homogeneous entity.

The Institutes initiated talks with Uplands and networked with LSC manager. With Uplands' supportive interventions, twenty-five farmers were actively engaged to comply with the Good Agricultural Practices (GAP)⁸ certification, a basic quality assurance scheme required by retail stores. To respect GAP guidelines, growers must record details of their application of pesticides which represents a considerable adaptation due to low literacy skills of most farmers. Throughout the three-month venture, Uplands kept farmers updated on key aspects of the marketing plans to enable farmers to coordinate their efforts and adjust their practices to meet buyer's demands regarding supply and fruits quality. This supportive and coordinating role of Uplands favoured an environment for the adoption of innovations for both Hmong farmers' group and LSC partners.

Once a LSC representative had visited the orchards, had given positive feedbacks and had found a family relation with one Institutes' member, the Institutes further networked and invited its contact, Cool Chain Service provider (CCS) to coordinate with LSC manager to airfreight litchi fruits to southern provinces. Despite the verbal agreement between these two actors, the proposal was rejected by the LSC representative, surprised to see an innovative value chain scheme involving a new partner: CCS. Because the Institutes were unavailable for two weeks, Uplands—in contrast with its prior supportive role—submitted a simplified proposal aligned with the initial expectations of the LSC representative. At last, a meeting with all partners was set up and led to a negotiation session between the leaders of the growers' group and LSC vendor, a lowlands farmers' cooperative.

Determinant factors in adopting innovations

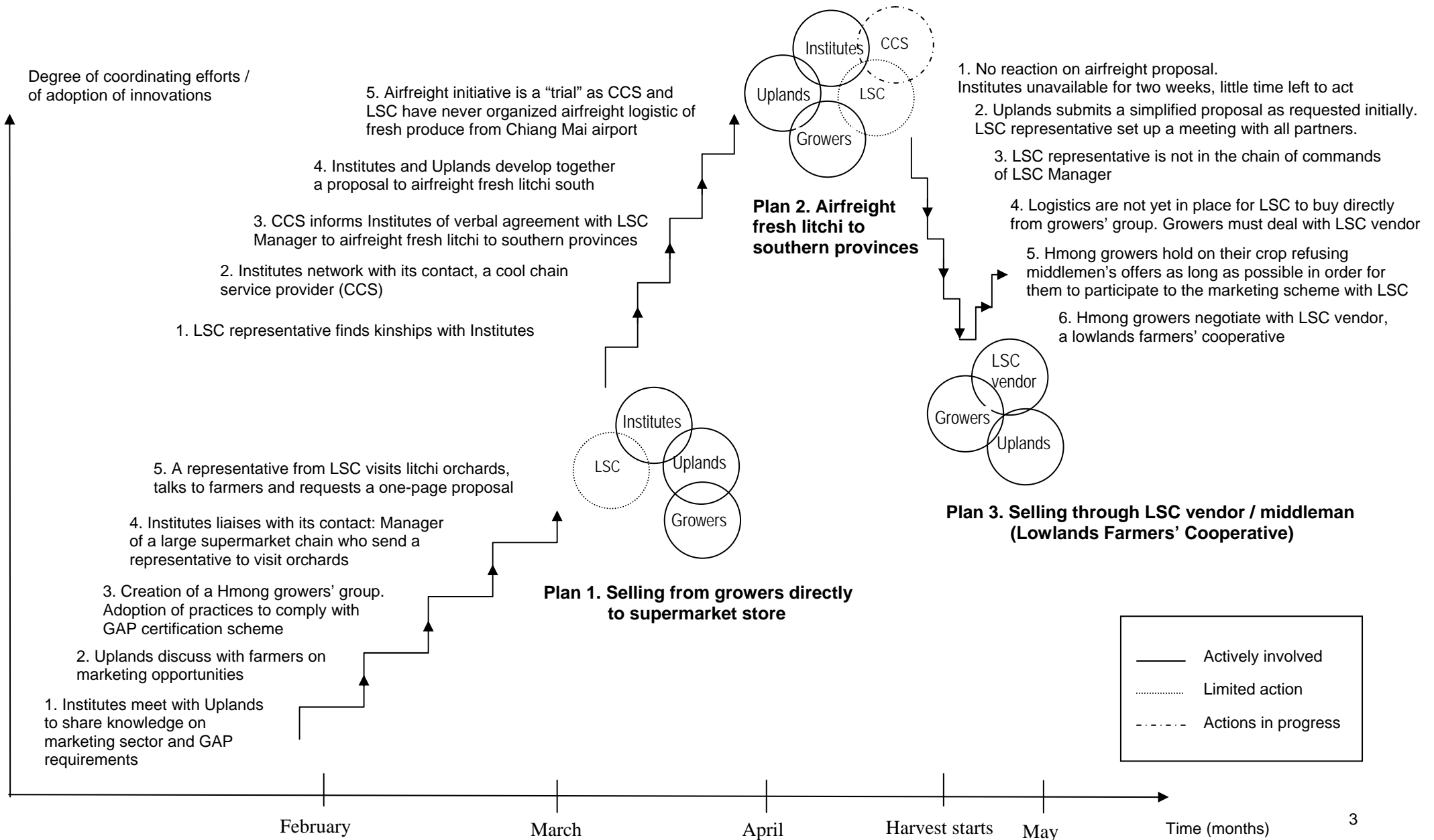
During the three-month efforts, various patterns of interaction were created to share knowledge and experiences on market demands and mechanisms, LSC's structure and logistics, Hmong farmers' practices and litchi production. These dynamic exchanges required on-going adjustments of the partners' roles and of the venture's objectives and strategies of implementation. The Institutes played a leading role in networking with their business contacts and in encouraging partners to adapt the marketing plan to cope with changing context. The innovative proposal to airfreight fresh litchi faced stale reaction as it displayed significant level of risks and unknowns exceeding the LSC

⁶ Innovation may be defined as “novel patterns of co-ordination and adjustment between people, technical devices and natural phenomena” (Leeuwis, 2004).

⁷ Contracted middlemen of LSC are called “vendors”.

⁸ Good Agricultural Practices (GAP) is a scheme to induce farmers to reduce the use of hazardous chemicals by imposing limits on pesticide residues and to encourage proper farming practices to satisfy food safety standards.

Figure 1. Partners' collaborative successive arrangements, as snapshots, for each marketing plan and chain of relevant circumstances, attitudes and actions that shape the interaction patterns over the three-month period of the marketing venture



representative's expectations and scope of work. The airfreight proposal required high level of coordinating efforts and interactive learning processes being a first-time trial that requires new logistics, technologies and partnerships. Besides the conservative attitude of the LSC representative, interpersonal and organizational reasons explain the dismissal of this value chain strategy; the *Institutes* was unavailable to maintain regular contact with both CCS and LSC Manager, who is not the direct superior of the LSC representative, one pitfall of the decentralized structure of LSC.

Early in the participatory market development, Hmong growers adopted several new social and technical practices. Hmong farmers organized themselves, coordinated their efforts, modified their agricultural practices to comply with GAP scheme and adapted their post-harvest handling techniques despite the large degree of uncertainty, as price offers and the agreement conditions were revealed late, past the peak of the harvesting season. The few innovations adopted by the buyers' group, who rather made specific demands and imposed its protocol, indicate its strong influence in shaping the development of the marketing plans and its limited gain. This suggests that the degree to which each partner adopts innovations reflects their expected benefits. In such, for marginalized Hmong farmers, adopting GAP guidelines, complying with LSC's demands, and building a long-term relationship with LSC means not only annual financial gains but a more secured livelihood.

Concluding remarks

Through their participation in developing a plan to market fresh litchi with a large supermarket chain and an academic-supportive group, Hmong marginalized farmers have realized the market value of high quality fruits that comply with food safety standards and sustainable environmental practices. Partners learned that high quality products do not alone guarantee market opportunities. Effective linkages and interactions amongst value chain actors exhibiting strong leaderships and influence are needed to encourage the adoption of key innovations and the elaboration of marketing plans which are in accordance with partners' level of commitment and attitude towards risks.

This joint marketing venture shows that participatory market development is a suitable option to empower marginalized farmers with desirable innovative practices. Establishing a long-term and trusting marketing partnership with a large supermarket that offers both stability and higher financial benefits has convinced Hmong ethnic minority farmers to maintain and properly manage their litchi orchards thus limiting land degradation in fragile mountain agro-ecosystems in northern Thailand.

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