

A short history of agricultural extension in Lao PDR

Andrew Bartlett

July 2011^a

The past 50 years has seen many changes in government organisation and service provision. Many projects have been and gone; some have been forgotten and others have had a lasting impact. The following is a selection of events that have influenced the current strategy.

1. 1965 to 1975 – The first big programme

The most significant programme of service delivery for smallholders prior to the creation of Lao PDR in 1975 was carried out by the Agricultural Development Organisation (ADO), a semi-autonomous body created by USAID, nominally under the management of the Director of Agriculture of the Royal Lao Government.

The first US agricultural experts arrived in 1955, and a rice breeding programme started in 1956. Four improved varieties were available by 1964, at which time it was realised that farmers would need other inputs and advice in order to make use of the new seeds. This led to the creation of ADO “with a view to stimulate and promote the development of agriculture in Laos”. As is the case today, food security was the primary goal, with the specific objective of achieving rice self-sufficiency by 1970. Also significant is that ADO was designed to use ‘businesslike methods... without hindrance from governmental agencies at the provincial and local level’.^b

The initial efforts of ADO were concerned with seed multiplication and distribution. This was soon followed by the direct sale of other inputs (fertilisers, pesticides, small pumps, sprayers, fencing materials), and the establishment of credit system (including group loans for larger water pumps). Efforts to improve the marketing system included rice purchasing and storage, a price information system and various public-private partnerships.

Controversially, ADO ran a scheme to create paddy land by clearing forest and then charging the costs to resettled farmers; ADO would buy rice from these farmers and deduct the cost of land clearance before granting land titles.

ADO activities were conducted throughout most of the country, from Attapeu in the South to Luang Prabang in the North. The organisation had legal and financial autonomy, and was initially capitalized by US commodity grants (primarily fertilizer and pesticides) and later equipment grants from the Japan. This helps to explain the emphasis on delivery of inputs, and the importance of the credit scheme. It also explains some of the problems that occurred:

high overhead costs, poor adaptation of technology to local conditions, reliance on foreign advisers, and low repayment rates.

A reorganisation of ADO in 1971 led to the establishment of a dealer network and the creation of the Lao Savings and Loan Cooperative. These changes reduced ADO involvement in the provision of individual credit and, subsequently, the organisation achieved break-even status in 1973^c.

In addition to the advisory activities of ADO, which were closely linked to the provision of inputs and the expansion of the paddy area, USAID supported capacity-building for the RLG Extension Service. The National Extension Service had been established in 1955 as the educational arm of the Directorate of Agriculture, with an initial staff of just 7 people. It was not until 1959 that demonstrations were established at crop research stations as a way of training a larger number of staff, and village surveys were carried out to assess farmer needs. Staff were also sent on short courses in Thailand and the Philippines. Extension 'field agents' were eventually assigned to villages in 1963 and by 1969 there were 177 agents working in 14 Provinces^d. Two years later, 350 agents received in-country training who – in turn - were able to train more than 3,000 farmers^e. The primary methods used by these agents were demo plots, cross-visits (known as 'tours') and farmer training sessions.

Early reports of these extension activities state that overall performance was 'satisfactory', and include claims that some rice farmers were able to increase their yields by 700%. Later reports were less enthusiastic. One problem was that - in the absence of adequate research - the extension service had little valid information to extend to farmers. When farmers did adopt new practices, this often depended on the provision of subsidized inputs. And the chronic lack of qualified government staff meant that much of the burden of managing the service rested on Americans recruited by the International Voluntary Service (IVS). Furthermore, while the RLG eventually began to pay salaries for some of the field agents, all operational costs – including vehicles, per diems and expendable items - were paid by USAID. In short: the service was unsustainable.

One positive aspect of the National Extension Service in the 1970's, however, was the involvement of women. As was the case in the US, agricultural activities were combined with 'home economics' as part of programme supported by USAID. This included training on nutrition, child care, hygiene and household finances. Consequently, the number of women attending extension sessions in 1971 was 45% of the total.

2. 1975 to 1986 - collectivization

The most important development in the ten years following the creation of the Lao PDR was the collectivization of agriculture, although this policy was not evenly or consistently applied.

The move towards collective forms of production was announced at the National Congress in December 1975, but it was explained that - for the time being - full-scale cooperatives would be established only on an experimental

basis^f. Many smallholders were affected the following year, however, by restrictions on market activity and the imposition of agricultural taxes.

It was not until May 1978 that the Government issued the Regulations on Cooperatives (#97)^g. At this point in time, the push to create cooperatives was seen as an important part of the ‘three revolutions’: the revolution in production relations, the scientific and technical revolution, and the ideological and cultural revolution.

The collectivization policy, as envisaged by Kaysone, focused on the exchange of labour, not – as in the Soviet case – on collective ownership of farming assets. In his own words:

“In the agricultural sector, at present and in the next few years, the revolution will basically be carried out by boosting the production units and labour-exchange units. Under this form, peasants are allowed to retain the right of ownership of farmland, cattle, farm implements and farm produce. However, under the new system the character of independent agricultural production cannot remain unchanged.” Peasants must “engage and expand the fine tradition of helping each other” and should “organize labour exchange teams for each farming season.”

The Lao approach was also intended to be based on voluntary action although this needed “positive leadership”.

The original push to establish cooperative was, however, short-lived. Serious flooding occurred in the rainy season of 1978 and it was soon realized that the reform of production relationships should not be carried out while farmers were struggling to feed themselves. Consequently, the Government suspended the policy on coops in July 1979 at the same time as loosening some of the restrictions on private enterprise^h.

The collectivization policy was renewed after the 3rd Party Congress in 1982, and abandoned again at the 4th Congress in 1986 with the launch of the New Economic Mechanism (NEM).

By the end of this period, almost 4,000 cooperatives had been established, although many of these were short-lived or existed in name onlyⁱ.

Twenty years later, when MAF reviewed the experience of establishing cooperatives between 1975 and 1986, the main lessons that were identified were:^j

- Collectivization of farmer production means failed. Collectivization of land was particularly not successful.
- Leading and technical apparatus of the farmer organizations should not be appointed by the administration.
- Scope of functions and services carried out by farmer organizations should be decided by their members and not by the administration. Farmer organizations cannot be assigned with targets by the administration.

3 1986 to 1998 – farmer training projects

Following the launch of the NEM there was a massive change in the source and type of external assistance for agricultural development in Lao PDR. While the 1980s had seen a large number of infrastructure projects funded by the Soviet Union and Eastern Europe, including the construction of many 'technical centres' that still exist, the 1990's saw a shift in emphasis towards farmer training funded by the UN and OECD countries. It is also worth noting that the collapse of the Soviet Union in 1991 coincided with the Fifth Party Congress where it was agreed that the agriculture sector would be the 'number one battlefield' for economic development, which required the widespread adoption of modern technology.

Among the projects implemented in the 1990's that have influenced the current strategy are the following^k:

a) Farmer Irrigated Agriculture Training (FIAT) Project

Between 1975 and 1995, more than \$180 million was invested in the irrigation sector. Most of the funds were spent on infrastructure and hardware, with very little going to operations and maintenance. When the GoL decided to shift towards farmer-managed irrigation schemes, it required a large undertaking in human resource development. This was addressed by the Farmer Irrigated Agriculture Training project (FIAT), funded by UNDP between 1994 and 1999.

FIAT used a cascade system to train 35 Master Trainers, 90 Provincial Trainers and 209 District Trainers. To support the training process, 10 training manuals were produced, including guides on 'irrigation management' 'methods of working with villagers' and 'gender in development'.

This investment in human resources led to the establishment of 66 Water User Groups and training for more than 6,200 farmers. The estimated increase in rice production by these farmers during the life of the project, as a result of expanded cropping area and improved yields, was 37,000 tonnes.

Another indication of the success of the training and extension system development under FIAT was the willingness of other donors and projects to pay for the services of FIAT trainers.

b) The Pilot Extension Project (PEP)

PEP was a three-year project that started in 1996. Responsibility for implementing PEP rested with a team based at the Agricultural Extension Agency (AEA) and with staff at the Provincial and District levels. The project was funded by the Novartis Foundation while technical assistance was provided by IRRI.

The objective of the project was to "develop the extension system at the Central, Provincial and District levels". Pilot activities were carried out in Champassak and Saravan. The PEP methodology was based on a number of principles, including:

- the village community is the unit for mobilisation and change
- farmers should develop the capacity to analyse their own conditions

- new technologies should be introduced on a trial basis, for farmers to evaluate themselves
- material inputs should not be provided to farmers, other than what is needed for small trials of new technologies

The methodology involved four steps: Preparation, Farmer Training, Follow-Up Visits, Participatory Evaluation and Planning.

Within 3 years, 40% of all families in the 46 pilot villages began using improved technologies for over 20% of the rice production area, with an average yield increase of 50%. Other interventions succeeded with small groups of farmers in particular areas.

PEP demonstrated the potential for a decentralised and participatory approach to extension that emphasised practical training and farmer exchanges. This experience greatly influenced the methodology used by subsequent extension projects, particularly the Laos Extension for Agriculture Project (LEAP), funded by Switzerland

c) FAO training in Integrated Pest Management (IPM)

Laos joined the FAO IPM programme in 1996 and is still a member. The most significant feature of this programme is the Farmer Field Schools (FFS)

The FFS involves weekly meeting by a group of farmers throughout the cropping season. During these meetings, the participants make close observations of the conditions of 'study plots' in farmers fields, and draw their own conclusions about how the crop should be managed. This methodology is called 'experiential learning' and it results in a practical understanding of agro-ecology, in addition to improving problem-solving skills.

Between 1996 and 2005, FAO supported more than 500 FFS in the central and southern provinces, attended by nearly 15,000 rice and vegetable farmers. The FFS methodology was also adopted by a number of NGOs.

As a result of attending FFS, Lao farmers have increased their yields by an average of 25%, with a 37% increase in profit margins. After completing training, some IPM farmers have continued to conduct studies on topics such as soil ecology, control of bacterial wilt, and production of tomatoes in the rainy season.

Like FIAT and PEP, the IPM-FFS demonstrated the effectiveness group-based training activities, and showed that farmers do not need to be given free inputs in order to adopt new practices.

d) Lao-Swedish Forestry Programme (LSFP)

The Government of Sweden began supporting the Lao Department of Forestry in the mid 1980's. When Phase IV started in 1996, one of the components was "extension and extension training". The precise objectives of this component included:

- To develop and provide participatory extension procedures and methods which promote positive interaction with village communities

and enable self-reliance, sustainable livelihoods and the sustainable use of natural resources.

- To incorporate participatory gender responsive methods throughout model development and in extension application in village communities, providing for equality in participation and benefits from the development process.

Testing of extension procedures got underway 1998 in Savannakhet and Salavan. This involved two parallel components: the Participatory Village Development Process (VDP) and the Extension Response Support process (ESR). In this way, extension work was demand driven, being tailored to needs identified by the community, as illustrated below:

Village Development Process (VDP)	Extension Response Support (ESR)
<ul style="list-style-type: none">• orientation/ preparation• livelihood planning• activity implementation• monitoring• evaluation and reporting	<ul style="list-style-type: none">• technology development• research and agency liaison• technology dissemination• village finance development

Village financing was an important part of the extension model developed under LSFP IV. Saving groups, credit schemes and revolving funds were established in the pilot villages, and procedures were established for the management of these funds.

The lessons learned under LSFP IV were applied in subsequent phases of the Lao-Swedish Programme. The integration of revolving funds and extension was picked up by the Forest Management and Community Support Project (FORCOM), funded by Japan. And the distinction between the VDP and the ERS was reflected in the activities carried out under LEAP.

4. 1999 to 2001 – restructuring

The year 1999 was a turning point for MAF. It saw the publication of a new strategy and the start of a major reorganisation.

The ‘Strategic Vision for the Agriculture Sector’ took the lessons from the previous 10 years and turned them into clear guidance for the further development and provision of services for farmers. The following extracts remain highly relevant:

“The demand for services will be farmer-driven” (page xi)

“There will be supportive institutional restructuring to enhance the capacity of MAF to supply direct services to farmers in an integrated multi-disciplinary

manner. The approach will be “bottom up”, wherein farmers identify problems through the existing village participatory mechanism”. (page xii)

“This approach emphasizes: (i) encouraging farming communities to express their problem; (ii) helping the communities to participate in finding solutions to their problems; and (iii) giving communities the opportunity to gain access to the resources to solve their problems”. (page 49)

“The present district staff, now organized along sectoral lines, will be trained as FSEW [Farming Systems Extension Workers] who have combined multi-sectoral skills...The mix of skills and activity foci in any area will vary, and will be tailored to the needs of the prevailing farming systems in each area”. (page 49)

April 1999 saw the establishment of the National Agriculture and Forestry Research Institute (NAFRI). This brought a number of existing research centres – dealing with agriculture, livestock, fisheries and forestry – under a single umbrella. The new Institute was given equal status with other technical departments under MAF, and was tasked with designing, implementing and coordinating *all* agriculture and forestry research.

The creation of NAFRI was soon followed by the creation of the National Agricultural and Forestry and Extension Service (NAFES) in 2001. The original mandate was to ‘coordinate extension projects and enhance the work of Provincial and District levels of the Extension Service by developing extension strategies, organising staff training and providing technical information in accordance with the needs of farmers’.

Whereas the consolidation of research involved bringing *staff* and *facilities*, along with the associated *budgets*, under the direct command of NAFRI, the consolidation of extension was – generally speaking - limited to bringing *functions* and *projects* under NAFES. A large number of provincial staff were initially assigned to the Provincial Agricultural and Forestry Extension Service (PAFES) but most had been moved back to the PAFO by 2005, leaving a smaller Provincial Agricultural and Forestry Extension Center (PAFEC). And regardless of whether it was called PAFES or PAFEC or (later) PAFEO, neither NAFES or the PAFO was given a budget for regular activities of the extension units at this level, with the result that they depended on short-term support from foreign projects.

5. 2002 to 2010 – the Lao Extension Approach (LEA)

The Laos Extension for Agriculture Project (LEAP) has supported capacity-building at NAFES since the organisation was created until the current day. Central to this collaboration has been the methodology known as the Lao Extension Approach (LEA).

In 2002, pilot activities were started in Champassak, Salavan and Luang Prabang using an expanded version of the process used developed under the PEP. The process was tested in 96 villages involving more than 1,600 farmers who were able to increase production from between 46% (rice groups) and

262% (chicken groups). These activities were led by the Central Extension Training and Development Unit (CETDU) which eventually became part of the Extension & Training Division of NAFES.

By the end of 2005, MAF had officially endorsed the LEA, and NAFES had published four important documents:

- The report on 'Consolidating Extension in the Lao PDR', which explained the background and rationale for the new approach,
- The 'Basic Tools Handbook, which' provided a detailed description of the 6 steps that make up the LEA at the village level,
- The 'Action Plan for Scaling Up', which described how the approach would be introduced across the country,
- A booklet called 'Extension for Everyone', which laid out why the LEA should be an inclusive approach that benefits women and poorer households.

The strategy for scaling-up involved 3-years of coaching activities for each Province. Activities started in 5 Provinces in 2005, 4 provinces in 2006 and the final 5 provinces in 2007. By the end of 2010, LEAP had supported the introduction of the approach into all 17 provinces and a total of 34 Districts. In each location, a team of 3 staff had been trained and equipped to implement the LEA.

Other projects that were involved in the scaling up of the LEA include:

- Agricultural Development Bank (World Bank funded)
- Nam Ngum River Basin Development Project (ADB)
- Small Holder Development Project (ADB)
- Sustainable Forest Management and Development Project (World Bank/Finland)

These projects have supported training of provincial and district staff carried out by CETDU, and have also funded learning activities for farmer groups using the LEA. In total, 18,500 farmers were trained using this approach by mid 2007.

6. 2005 to 2010 – Capacity-building and collaboration

Following the endorsement of the Lao Extension Approach in 2005, a number of projects have supported capacity-building at NAFES in addition to funding field activities.

LEAP funded the construction of the National Information Centre for Extension (NICE) while SUFORD and the Nam Ngum Project have both funded new office buildings.

Improvements in planning and management systems have also been achieved at the project level, but it has been more difficult to make sustained

advances across the organisation as a whole. This situation is partly explained by the lack of budget for regular operations, with the result that supervisory and coordinating functions are under-resourced.

There have been successes, however, in collaborating with other organisations at the national level. The activities of two working groups deserve particular mention:

- As an outcome of the National Workshop on Research-Extension Linkages in 2005, NAFES and NAFRI created the Agricultural Information Management (AIM) Working Group which has been a channel for collaboration over the past 5 years. The AIM working group has been involved in staff training, the production and dissemination of information materials, and the establishment of a network of information focal points in each District.
- In 2006, MAF assigned NAFES the role of co-chair for a new Working Group on Agribusiness (SWGAB), with members coming from a number of Government agencies and development partners. The SWGAB has carried out studies on a number of important policy issues (eg. contract farming, kumban development, farmer organisations) and provided the impetus for the largest online discussion group related to development in Laos, known as 'LaoFAB'.

From LEA to LEA+

The MAF strategy for 2011 to 2015 recognises the LEA as one of the 'best practices' in the sector. Nevertheless, some elements of the approach have worked better than others and there is a need for both flexibility and further improvements.

In 2010, NAFES started to implement a more advanced version of the approach consisting of two stages: 'LEA Basic' and 'LEA Plus'. Each stage consists of 3 main steps: participatory planning, group-based implementation, and participatory M&E.

The Basic stage is a simplified version of the approach that was implemented over the past 10 years, and this can be implemented under almost all circumstances. Groups are formed to receive training in production techniques for food crops and small livestock. In the past, these activities were followed by the launch of the 'village extension system', but it has been found that this rarely succeeded. Now, the Basic stage will be followed by the Plus stage.

Details of what happens in the Plus stage vary from place to place based on decisions by the community. This could include participatory land use planning, agro-enterprise development, establishment of revolving funds, and facilitating development of farmer organizations.

Notes and References:

^a This document was originally prepared as part of 'Strategy 2011-2020: A breakthrough in support for small farmers', National Agriculture and Forestry Extension Service (NAFES), funded by SDC/Helvetas through the Laos Extension for Agriculture Project

^b Ted Jones, Russell Frazier and William Henning Jr. (1969), An Evaluation of the Agricultural Development Organization of Laos. USAID /Ohio State University.

^c USAID (1976) Termination Report – USAID Laos

^d USAID (1969) Project Appraisal Report: Agricultural Extension

^e USAID (1971) Project Appraisal Report: Agricultural Extension

^f Grant Evans (1988) Agrarian Change in Communist Laos. ISEAS Occasional Paper 85

^g Adam Fforde (1995) From Plan to Market in Laos, 1975-95: a Study of Transition and its Aftermath. SIDA

^h Grant Evans (2002) A short history of Laos : the land in between

ⁱ Olivier Ducourtieux, Jean-Richard Laffort and Silinthone Sacklokham (2005) Land Policy and Farming Practices in Laos

^j MAF (2010) 'Vision and strategy for developing Farmer Organizations', Presentation, 12 March 2010

^k This section is based on NAFES (2005) Consolidating Extension in Lao PDR, section 2.3