

AGRICULTURAL EXTENSION CUTSEARCH PROJECT EVALUATION

Consultant Report

By

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RECOMMENDATIONS

*More research and analysis of international agricultural commodity markets must be undertaken within Thailand if Thailand is to compete effectively within these markets, effectively plan its agricultural policy, and enable a greater return to reach the farmer. Specifically RTG price and quota policies must be monitored and evaluated on a continuing basis with the results of the studies made public to encourage discussion and debate. (Paras. 8-17)

*Specific information on the market prices of agricultural commodities at various market levels must be made available to the farmer through the mass media to enable him to obtain the best possible prices for his goods. (Paras. 18-21)

*More use of radio and brochures must be made to diffuse agricultural information currently available in Thailand. Farm radio programs are currently popular, but can be improved in both quantity and quality. Private sector sponsorship of such programs exists at present and can probably be expanded. Printed brochures are currently available from both RTG and private companies, but their content and distribution can be improved. (Paras. 22-38)

*Private agricultural chemical and seed companies are most active in areas of Thailand where the return on investment is highest. Such organizations could become active in poorer agricultural areas of Thailand, were some of the direct costs of establishing their organizations and products in these areas subsidized. Such a subsidy need not be 100% and could be limited to three to five years. (Paras. 39-45)

*While considerable international donor agency and RTG funding has gone into the improvement of transportation, irrigation, agricultural extension and seed technology and there is considerable private sector activity in the agricultural chemical and seed industries, far less attention appears to have been paid to fertilizer, a very key input for Thai agriculture. RTG pricing and quota policies for the fertilizer industry appear to be similar to those which have characterized agricultural export policy. . . A continuous monitoring and evaluation of the fertilizer situation is needed to bring greater rationalization to this important industry. (Paras. 50-51)



INTRODUCTION

Background

1. The Agricultural Extension Outreach Project (AEOP) supports a national agricultural extension program through the Department of Agricultural Extension (DAE) under the Ministry of Agriculture and Cooperatives. This program seeks to establish in all tambols throughout the Kingdom tambol extension agents (KT's), who are supported specifically by Subject Matter Specialists, other technical inputs, a research and evaluation section, and the general structure of the DAE.
2. The AEOP supports primarily the costs of recruitment and the training of the TA's and the SMS's.
3. The review team found that while many KT's and SMS's were in place, their qualifications and training were not at a very high level of sophistication, which lack raises serious questions about their ability to offer useful solutions to problems facing farmers.
4. A number of recommendations on recruitment and training have been made, including the establishment of closer links with the research efforts of the Ministry of Agriculture and Cooperatives and a more active role for the provinial technical committees.
5. Most of these recommendations and others in the general report are aimed at strengthening the bureaucratic system within which the KT's work, namely the DAE.

6. This report, while recognizing the importance of strengthening the DAE, given the tremendous investment which the Royal Thai Government (RTG), USAID and the IBRD have already made, seeks to look outside that system into areas which might have as much an effect on the farmers as that system itself. Some of these areas might also be worthy of further investigation by USAID.
7. These areas include external markets, internal markets, information, and technology. Within these areas the roles of both the public and private sector are considered.

External Markets

8. Given Thailand's excellent export record in agriculture, the importance of external markets cannot be ignored. Indeed the RTG spends vast sums each year in the sending of trade missions, signing of trade agreements, and overseas promotion of Thailand products. These efforts often contrast, however, with official pricing and quota policies which severely constrain Thailand's ability to export.
9. In recent months dramatic changes have taken place in some of these policies, which have seen the freeing of key agricultural commodities from fixed prices and quotas. The most recent example is rice.
10. It would appear that the lifting of these restrictions has brought an increase in prices at the farm level, despite the fact that world-wide prices for these commodities have generally been lower in 1981 and 1982 than in previous years. For many commodities government agencies have been unable to pay the farmers the guaranteed prices which these agencies themselves have fixed.

11. A freer export policy may well provide farmers with greater income, reduce the basically ineffective role of government marketing efforts, and enable long-term agricultural planning to be carried out in a more realistic context, namely that of international agricultural markets.
12. These issues are not as simple as they seem, however, and the possible exploitative role of middle men and interest groups has to be considered. The replacement of ineffective government agencies by monopolistic trading entities would hardly improve the lot of the farmer.
13. To understand these issues continuous studying and monitoring of basic agricultural commodities must be undertaken. On an international basis this is done by organizations like IFPRI, FAO and others, many of whom are relatively free from specific government policy.
14. In Thailand such studies, if they are done at all, are usually done within government ministries and the results are not made public nor even circulated widely with the bureaucracy.
15. The capacity for this kind of analysis exists within Thai universities, though no single institution is likely to have sufficient capacity by itself. There have been discussions within Thailand about the establishment of a policy research institute, which might undertake such studies and monitoring and which could draw on the resources of various Thai institutions. A feasibility study for the establishment of such an institute was funded by The Ford Foundation.
16. If Thailand is to continue as an exporter of agricultural products, it must have the research and analysis capacity to understand international agricultural markets and to plan its agricultural policy in the context of those market. To do otherwise is both futile and foolhardy. Moreover, in the long term the farmer is the big loser in this kind of planning.

17. The studies carried out by such an institute should be made public, encouraging public exposure and debate about the very complex issues involved.

Internal Markets

18. External and internal markets are obviously closely linked, but are treated separately here because measures to improve access to these markets differ. In the last decade access to internal markets within Thailand has increased dramatically. Probably the most important single factor in this increased access has been the development of an excellent road system, a development not specifically planned with agricultural development as the primary target.
19. While no times series information is available, in the three rural areas surveyed in the evaluation of the AEOP, 63%, 67% and 22% of the farmers in Mahasarakham, Kalasin and Roi Et respectively reported visiting urban areas (muang amphoe) one to two times a month or more frequently.
20. Despite increased access, however, farmers would like to have more information on market prices for their goods. In a survey undertaken by the Thai-German Project (TGP) in Korat, farmers were asked to suggest subjects which they would like to see covered in the radio broadcasts of the TGP. 36% of the farmers wanted more information on market prices.
21. While transportation, storage facilities and other factors are crucial in enabling the farmer to obtain the best prices for his crops, more information on market prices would be helpful. The TGP has set up a telephone network of key informants at various levels within the marketing system to pull together price information and then broadcast it in their programs. This kind of information should be available for and broadcast at both regional and national levels.

Information

22. While market prices are a specific type of information related to internal markets, the whole general area of agricultural information needs to be considered carefully. An increase in the quantity and quality of that information would be of direct benefit to farmers, to KT's and others in the DAE system, and to the private sector as well.
23. The AEOP evaluation team found a lower than desirable level of qualifications among both KT's and SMS's. Often they could not be helpful to farmers because they themselves lacked relevant, applicable agricultural information.
24. The solution normally proposed for this problem is more training. While it seems clear the quality of education in the institutes from which these persons graduate must be dramatically improved, it seems unlikely that training sessions after the TA's and SMS's are on the job are likely to be effective, particularly given the thousands of persons who would have to be involved. This is not to suggest that training and other materials should not continue to be developed and diffused by the DAE, but rather than more information must be made available over and beyond the DAE system.
25. There is currently considerable information available in the form of farm-radio programs, which are also quite popular. Radio in general is a medium widespread in rural Thailand. In surveys done for the AEOP evaluation in Mahasarakham, Kalasin and Roi Et the proportions of farmers listening daily to radio ranged from 52% to 68%. The proportions of farmer households having radios were 83%, 84% and 91% respectively.

26. Agricultural radio programs are popular with 84%, 68% and 72% of the farmers listening to these programs at least several times a week and often on a daily basis. More than a third of all farmers find these programs very useful.
27. The TGP has developed its own programs, Kaset Sampan and Mor Kaset. In its survey in Korat the TGP found that 29% of all farmers listened to the former, and 10% to the latter. Other popular farm programs in Korat include those sponsored by a farm store, the Shell Company, Radio Thailand, and Kasetsart University. Those broadcast over Radio Thailand from Khon Kaen are put together at Taa ra.
28. The TGP programs are listened to with neighbors or family members in 56% of the cases. The programs cover areas such as pest control, fertilizer application for paddy and vegetable crops, cultivation of cassava, corn, cotton, peanut, straw mushroom and vegetables, compost making, chicken raising and vaccination, pig raising, and marketing and input prices. 78% of the farmers feel that they gain knowledge from these programs and 53% of these actually applied the knowledge according to the survey.
29. The TGP programs draw letters which are answered by the TGP team. Additionally a Mobile Agricultural Extension Team follows up with groups of farmers who have listened to the programs. The KT has responsibility for helping in the organization of these teams and their visits.
30. The existence of farm programs would seem to attest to their usefulness. There would appear to be an opportunity to expand the numbers of these programs through sponsorship from the private sector, as Shell and a farm store are already doing in Korat.

31. Very careful attention must be given both to the content and the format of these programs. The TGP survey, for instance, found that 38% of the farmers preferred to have the shows be based on a dialogue between male and female announcers and another 32% preferred this kind of dialogue accompanied by folksongs (mor lam).
32. Currently many of these programs rely heavily on lectures which are not a very interesting format and which often contain advice irrelevant for the audience listening to the program. More regionalization of the programs is needed.
33. Finally while such programs can play a vital role, they should be supported by demonstration teams, printed materials, etc. 31% of the farmers in the Korat survey suggested that hand outs and leaflets should be made available. The AEOP found that in Mahasarakham, Kalasin, and Roi Et, 46%, 74% and 72% of the farmers had never received any agricultural extension materials.
34. Among contact farms these figures were 67%, 25% and 13%, an indication that some materials are distributed, but not widely.
35. The production of agricultural brochures and materials might be another area of interest to the private sector. There would appear to be considerable variation in the quality of these materials at present. Some are narrowly promotional with little educational and informational content. Others are more sophisticated with information on recommended applications, the suitability of crops for particular regions, etc.
36. In short, radio and brochures appear to be media which could be more effectively utilized for the diffusion of agricultural information which could be of great value and application to the Thai farmer. An evaluation of the programs of the TGP and other programs currently being

broadcasted would provide an indication of the quality and usefulness of contents and also the coverage of such programs. Information on the sponsorship of these programs could also be collected.

37. Similarly the contents of brochures produced by the Ministry of Agriculture and Cooperatives and private sector organizations could be evaluated as to their usefulness. Constraints on the availability and distribution of these materials should be documented.
38. Measures to increase the use of mass media and the quality of information could then be developed involving both the RTG and the private sector.

Technology

39. Much of USAID and IBRD's assistance has gone into the improvement of major inputs for Thai agriculture. These inputs include water, seeds, and agricultural extension. Less donor assistance has been available for improving inputs like insecticides and fertilizer.
40. The agricultural chemical industry in Thailand appears to be developing primarily through the private sector with many national and multi-national companies active, e.g. Dupont, CP, May and Baker, Monsanto, Union Carbide, ICI, Shell and Ciba-Geigy.
41. These companies have their own distribution networks and also rely on representatives and dealers to ensure optimum distribution. Some pesticide manufacturers have rather narrow product lines which are best handled by independent distributors and dealers, who carry a wider range of products than does any single manufacturer.

1. The quality of these representatives and dealers varies, e.g. some have greater technical knowledge of agricultural chemicals than do others. This same kind of variation exists for KT's and SMS's. However, what motivates agricultural chemical manufacturers, representatives and dealers is that they must produce (sell) to survive, while a KT or SMS will continue to draw salary and allowances regardless of his or her effectiveness. The incentive to produce is higher for private sector employees.
43. Many of these persons regard the KT's as well meaning, but basically with little to offer. They believe that KT's are seen as most effective when they have some insecticide, seeds or fertilizer to offer, but that this effectiveness is short-lived and unrealistic. When there are not free inputs, the KT cannot be effective.
44. At the same time agricultural chemical and seed companies are aware that certain areas of Thailand do not currently constitute attractive market opportunities because of low incomes and limited purchasing power.
45. While the AEOP treats all provinces, amphoes and tambols in an egalitarian fashion, e.g. all tambol should have KT and all provinces 5 SMS, the private sector treats these units according to their market potential. It would thus assign more persons to cover the wealthier agricultural areas and fewer to cover the poorer areas.
46. To develop the poorer areas private companies would have to subsidize their field force by providing more staff for poorer areas to search out those farmers who can afford to purchase inputs and to offer advice to help those farmers who are not currently purchasers to become purchasers.

- 47. Preliminary discussions with several multi-national seed and agricultural chemical companies have indicated that they would be prepared to pay part of the direct costs of the subsidization if an organization like USAID would be prepared to pay part. The costs to be covered would be only the direct ones of manpower and transportation with the companies taking care of the costs of inputs. USAID and the RTG could specify particular geographical areas, in which such a scheme might operate.

- 48. A number of companies might participate, thus enabling a larger number of areas to be covered. Such a scheme could operate for a three to five year period. At the end of this period the company would be in a position to determine whether or not it would be in the company's interest to continue to employ staff based on the level of agricultural development achieved. If the level were too low, then the company would no longer support its staff and the scheme would have failed. However, no permanent bureaucracy would have been created.

- 49. By making more inputs available in the field, such a scheme could increase the effectiveness of the KT's as well.

- 50. The kind of geographical targetting suggested for this scheme might also be used by the DOAE with promotions and other incentives tied directly to KT achievements in the field. Suitable indicators of KT performance would have to be developed and the general level of agricultural development in the tambol should be factored in. Currently the DOAE seems to have no real system for evaluating TA effectiveness nor for that matter the overall AEOP.

- 51. The chemical inputs dealt with above include agricultural chemicals and seeds, but not fertilizer. The need for fertilizer by farmers has been clearly articulated, but the fertilizer industry in Thailand seems to be

far less rational in structure than the seed and agricultural chemical industries.

52. One of the reasons for this is that the fertilizer industry remains almost totally dependent on imported products, the quantities and qualities of which are largely determined by government policy. The fertilizer situation is not unlike that of the export for certain commodities as described in Paras. 8-17 of this document.
53. Perhaps studies similar to those proposed for basic commodities could also be undertaken for fertilizer, which is as sensitive as commodities to international movements. There would appear to be a role for USAID in helping to fund such studies. There might be an additional role in interesting United States fertilizer manufacturers in looking into the fertilizer situation in Thailand. Currently European and Japanese companies seem to be far more active.

APPENDICES

METHODOLOGY

1. As a part-time participant in Agricultural Extension Outreach Project Evaluation Team I was asked to look at two major issues, the Developmental Impact of the AEOP and the Diffusion of Technology Outside the RTG Extension Network.
2. Since there was no systematic data made available by the DAE on the AEOP, it was not possible for me to establish the existence of any kind of direct linkage between the work of the extension service and increased production on any national basis.
3. Moreover, given the limited time available for the field survey in three Northeastern provinces and the nature of the survey team, it was not possible to collect reliable production information in even those three provinces.
4. As a member of the sub-team responsible for the design of the farmer questionnaire, I did help design questions which sought information on what farmers believed to be the most serious constraints to the adoption of improved varieties/practices and/or increased farm production. Responses to these questions are contained in the Tabulations of Farmer/Contact Farmer Interview (sic) and also in the Evaluation Team report.
5. Except for this narrow treatment I was unable to evaluate the Developmental Impact of the AEOP.
6. Rather I concentrated on learning about the Diffusion of Technology Outside the RTG Extension Network through including questions in the

farmer questionnaire on radio listening and farm radio program listening in particular. I visited farm dealers in Chiang Mai, Mae Rim, Phuket and elsewhere after the Evaluation Team had disbanded. I also interviewed directors and staff of several agricultural chemical and seed manufacturers in Thailand. Finally I spent several hours with members of the Thai-German Project in the Ministry of Agriculture and Cooperatives.

7. I participated in meetings of the Evaluation Team at USAID and the Bureau of the Budget. I prepared the tabulations for most of the farmer and contact farmer questionnaires and all of the cross-tabulations which were used by various members of the Evaluation Team.