

VIENTIANE PLAIN VILLAGER INHIBITIONS TO ACCEPTANCE
OF MODERN FARMING METHODS

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June, 1972

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SUMMARY AND CONCLUSIONS

The survey covered 136 villages in the seven districts which comprise the Vientiane Plain: Sayfong, Thadeua, Saithany, Nasaithong, Phone Hong, Phanthaboun and Thourakhoun. A total of 352 people were interviewed.

The findings of this survey indicate that no one concern can be allowed to bear the full burden of the lackluster growth in the production of rice in the Vientiane Plain in recent years. There have been many diverse influences on the Vientiane Plain farmer and on his abilities and/or desires to modernize and produce. Constant flooding in many areas of the Plain has been a major problem. It has caused many normally conservative villagers to become even more conservative. The flooding has also destroyed many thousands of tons of rice which might otherwise have been marketed.

Recently, insect infestations of what would seem to be "Gall Midge" have caused crop losses of an estimated 50% in Saithany and Phone Hong districts. Many of these illiterate, unknowing farmers are placing blame on the recent introduction of fertilizer.

Farmer health conditions, farmer age, farmer illiteracy, and many other problems are villager inhibitions which have become a major obstacle in the effort to encourage the farmers to grow more rice through improved practices.

The RLG can also be noted for a less than laudatory performance in its role as agent of change in promoting acceptance of new practices. Little evidence was uncovered that the RLG extension agents were either conscientious or successful in promoting changes in farmer practices. Scant evidence was uncovered that other "time-proven" methods such as demonstration plots and farmer-leader training classes have produced tangible results. No new rice varieties were discovered among the type of seeds the farmers use. They raise the same glutinous and/or non-glutinous rice they have historically used.

However, the relative failure of attempts to encourage increased production of rice in recent years cannot be completely attributed to the RLG Agriculture group. The problems have been manifold and Agr. did not have sufficient resources and/or the cooperation of other units of the RLG to promote desired change.

In general, there was no evidence of any great effort by the RLG powers-that-be to support a program which would significantly promote the production of rice in the Vientiane Plain. RLG agriculture did what it was expected to do, made the appropriate noises/moves to keep the general funds flowing into her coffers.

Other governmental units, such as the Army, the Chao Khoueng and Chao Muong and RIG Education were not involved. These groups could have helped. They could have promoted the program. But they were not involved for very simple reasons.....they were not asked and they could detect nothing by which they personally could gain.....no incentives or motivations!

Some studies are expected to reach opportune conclusions and to appear in a form that is regarded as advantageous, or at least not disadvantageous, to national interests as these are officially and popularly understood.

Choice is narrowed if we exclude compulsion or threat of compulsion and other practices condemned by the ethos of Western civilization.

However, we must consider all the elements which may be influencing the Vientiane Plain farmer at this time and those elements which may influence him in the future.

No longer do we assume that in their economic pursuits people have the singlemindedness of the "economic man" of classical economic theory. Recognizing that even in their economic choices people are conditioned by their total mental make-up and, in particular, by the community in which they live, that they are motivated in a variety of ways as are all human beings in their behavior, we are directing our attention more and more to the interplay of these forces.

Henceforth, our studies of social discipline note that policies decided on are often not enforced, if they are enacted at all, and the authorities, even when framing policies are reluctant to place obligations on people. The success of planning for development requires a readiness to place obligations on people in all social strata to a much greater extent than is now done. It requires, in addition, rigorous enforcement of obligations, in which compulsion plays a strategic role. This value premise would not in principle conflict with the ideal of political democracy, which only concerns the manner in which policies are decided upon.

If this value premise does not conflict in principle with the ideal of democracy, it often does in practice. Conflict arises when modernization ideals do not have -- and, with the means available in a democratic setting, cannot be made to have -- enough force to induce people, including the intellectual elite, to voluntarily undertake diligent efforts toward their realization and cast aside conflicting valuations. This very serious problem should not be concealed. Under present conditions development cannot be achieved without much more social discipline than the prevailing interpretation of democracy here permits. An authoritarian regime may be better equipped to enforce social discipline, though its existence is no guarantee of this accomplishment.

The Lao heritage is an authoritarian tradition that was strengthened by colonial rule. In the type of authoritarian society that prevailed, the masses of people were accustomed to rely on higher-ups to organize and direct their activities. On the other hand, they very often exhibited a sullen attitude of non-obedience. People were accustomed to being ordered about, but also to getting away with as much as possible. The only way to overcome such lawlessness -- which

usually manifests itself in a casual and amorphous way rather than in organized rebellion -- is by exhortations, threats or appeals, punitive action, educational efforts and other individualized and discretionary controls. It is characteristic of an authoritarian society, however, that the people in command -- whether officials or those who because of their social and economic position hold power in the villages and districts -- become accustomed to indulge the people's resistance to a punctual and efficient fulfillment of duties.

However, while not advocating strict authoritarian rule, perhaps an infusion of social discipline into the Laotian society would prove beneficial. When it is necessary to arrange for work to be done in new endeavors, where previously every man was his own master, a new discipline must be established.

A cohesive group, organized on authoritarian lines, is probably better able to obtain given objectives than is a group more individualistically inclined. The cohesive, authoritarian group will also have superior economic growth, if the chief knows better than the individuals, the measures which growth requires. The chief can enforce education, or improved technologies or the use of better seeds, or a higher level of capital formation, or changes in social relationships. Hence, it is not true to say that growth depends on the individual having room to maneuver, if the alternative is that the individual will be compelled to do things which lead to growth. 1/

It is possible that in some underdeveloped countries such as Laos, resources are so limited that it is impossible to plan realistically for a take-off in the near future. In that event, there may be a case for concentrating on raising agricultural productivity in the short run, so as to produce the surpluses that can be recaptured to finance the next phase of economic growth. If this is the only route to a take-off open to a particular country, no great argument can be made against it. However, it is a route that can easily lead instead to further stagnation. For raising agricultural productivity as part of a program for establishing preconditions for a take-off means preventing the increase in agricultural output from improving rural living standards; otherwise it may merely freeze the existing structure. Also, if there is further population growth, no permanent gains in agriculture may be attained even in rural welfare. Yet recapturing initial gains in agriculture to finance further development is politically very difficult.

The "up by the bootstraps" approach has succeeded in the past only where severe sacrifices have been forced on the masses of the people, to provide a basis for capital accumulation. The "up by the bootstraps" approach proposed for underdeveloped areas today may not require reductions in the standard of living to start the development process, but it does mean that the initial increases in output must be denied to the people, in order to provide an export surplus to finance further expansion. An integral part of the scheme is increased taxation for farmers, first to compel them to produce more than before, and secondly to drain off the increase in output and income as the development projects have their effect. This increase in taxation, and consequent prevention of initial improvements in living standards is necessary not only to provide an export surplus, but also to prevent the increased productivity from being converted into increased leisure or a more rapid rate of population growth rather than into increased output. Given the tax structure and general political situation in Laos, it is highly questionable whether small increases in per capita income, however, which might be obtainable through improvements in techniques with the

present structure of the economy, can be recaptured. 2/

1/ W. Authur Lewis, The Theory of Economic Growth, Harper & Row New York and Evanston, 1965

2/ Benjamin Higgins, Economic Development, Problems, Principles & Policies, W.W. Norton & Co. Inc., New York, 1968

Many would challenge the embracement of social discipline as a vehicle for economic growth, and it is healthy that they should. For an essential ingredient to progress toward an understanding of the complexities of the development process is the dialogue in which generalizations are advanced, challenged, and then modified and corrected. In this fashion, the sources of differing interpretations and conclusions can be isolated and inspected.

I. NATURE OF THE STUDY

Introduction

This study is the result of field surveys carried out in the rural areas and villages of the Vientiane Plain in an investigation of various villager inhibitions which comprise obstacles to the modernization process. Specifically, the study queries the reluctance of the villagers to engage in modern farming practices which would result in increased rice production. The study looks at the following items which actuate farmer inhibitions to modernization ideals:

Natural Disasters.....Flooding
Villager Literacy Levels
Farm Practices....Sectional Differences
Incentives/Motivations/Barriers
Soil Conditions
Insect Infestations
Village Health
Coordination of Programs
Secondary Cash Incomes
Marketing
Manpower Drain

Locale

This study was conducted in 136 villages in Vientiane Province. The survey covered villages of different sizes and in locations of differing terrain in the districts of Sayfong, Thadeua, Saithany, Nasaithong, Phone Hong, Thourakoum and Phanthaboun.

Many of the Sayfong and Thadeua villages surveyed were situated along the Mekong River and were influenced greatly by yearly flooding, proximity to Vientiane and proximity to their Thai neighbors.

Sizeable portions of Saithany and Nasaithong are also influenced by their closeness to Vientiane, while sizeable portions of Nasaithong, Phone Hong, Phanthaboun and Thourakoum are influenced by their relative isolation.

Method of Research

The field research on which this study is based was conducted in Vientiane Province by Fletcher H. Poling and Sengdao Rattanasamay during the month of January, 1972. Thirty-four percent of all the villages in the Vientiane Plain, excluding refugee villages, were surveyed.

The districts of Sayfong, Thadeua and Saithany were surveyed jointly by Poling and Sengdao. The districts of Nasaithong and Phone Hong were surveyed individually by Poling. The districts of Phanthaboun and Thourakoum were surveyed individually by Sengdao.

The interviews were largely conducted at random within a given village. The persons interviewed were usually middle-aged or elderly men. There was a district paucity of young men in the villages. No attempts were made to seek out village leaders for interviews. Although these men are among the most knowledgeable in the village, the author's experiences with village leaders has indicated that the leaders are more conditioned to tell an RLG officer or a foreigner what he thinks they want to hear, rather than offering an honest appraisal of his thoughts on the situation. The village leader, from past experience, has learned that this is the most nearly wise course to follow. The villager with little or no past experiences with RLG or foreigners will usually respond in a more straight-forward manner.

The time-frame allowed for conducting the survey did not allow for completion of interviews with large amounts of people in a given village. In some villages only a single person was interviewed. Although the relatively small percentage of village population interviewed in each village might lead the skeptics to lay suspect the accuracy of the study's conclusions, it is the opinion of the interviewers that the uniqueness of the Lao village and the Lao rural society has nevertheless rendered the study and its conclusions valid. While the closed society of a particular village does not offer many examples of glaring differences in thought, traditional practices, motivations, etc., within the village, villages in different settings may show marked differences. The differences may be caused by variations in soil conditions, water supply, village leadership, etc. Therefore, the main thrust of the survey concentrated on possible differences between the many villages with possible varying structures rather than between villagers within a village.

The writer's previous study, "Business Operations in the Vientiane Plain," and his two years of experience as Community Development Advisor in Sayfong, Thadeua, Nasaithong and Saithany districts; including hundreds of day visits and overnight stays in village homes in dozens of isolated rural villages offer further credence to the study. Sengdao Rattanasamay previously operated as a community Development Advisor in Phanthaboun and Thourakoum districts for five years and is well acquainted with the people and the farming conditions in those area.

Individual interviews were conducted in very informal face-to-face conversations which covered a wide range of the villager's life and interests. Although some of the interviews were less than satisfactory in view of the villager response, the large number of villages surveyed allowed the emergence of definite patterns of response.

II. PROBLEM AREAS CAUSING DISINCENTIVES TO EXPANDED RICE PRODUCTION

Natural Disasters.....Flooding

The land area adjacent to the Mekong River from Ban Bo-O in Sayfong district to Ban Nong Say in Thadeua district includes many thousands of hectares of paddy land. A very large portion of this land has been flooded in 1969, 1970 and again in 1971. A large portion of the glutinous rice crop normally produced in this very fertile land has been lost each year.

The soil in this area is rich and the farmers normally produce a surplus of rice. They generally retain however, a sizeable supply of rice in the family granaries, rather than sell all of the surplus each year. This rice is retained as insurance against the possibility of crop failures. Henceforth, most of the villagers along the Mekong have not yet had to purchase rice for family consumption, although they have suffered flooding for three consecutive years. These families will probably not be desirous of selling large amounts of surplus in coming years until they have replenished stocks for family consumption.

Farmers in this area who previously used fertilizer are loathe to try it again. They have invariably lost their investment because of flooding and are unwilling to take the same chance in coming years. These villagers have developed an almost psychic attitude to the inevitability of the coming of the floods.

In addition to the numbers of farmers suffering from the yearly flooding of the Mekong, many farmers along the Nam Ngum River in Saithany and Nasaithong districts reported flood losses for the second consecutive year. The Nasaithong farmers along the Nam Ngum River reporting losses, however, noted that their 1971 losses were smaller than in previous years. Other villages located along various streams and ponds suffer occasional flooding. The villagers do not want to use fertilizer because they are afraid of losing their investment.

Villager Literacy Levels

An estimation made in 1968 with the aid of UNESCO consultant, R. Couvert (within the functional literacy project of the Vientiane Plain) using a scale comprising 6 degrees of increasing difficulty and applied to a 1/5 sampling dealing with 232 persons noted: No woman over 24 and no man over 45 can be considered literate (to know how to read, to write, to count and to compute).

As previously noted, the farmers interviewed in this survey were middle-aged or elderly men. There are very few young men in the villages. The villagers do not know how to compute a hectare, a rai, a kilo, etc. They speak in terms of "bungs" (baskets) and muns (12 Kg. lots).....but they do not equate this with actual visual amounts. Therefore, if an agent of change, promoting the use of fertilizer, is speaking in terms of kilos and rai --- the farmer will probably have a different conception of weight and size. Even in those few instances where the farmer noted that the change agent had indicated that application of fertilizer should be calculated in numbers of handfuls, the farmer did not equate the size of the plot to be fertilized in similar terms.

Also, many farmers admitted that they forgot suggested levels of application by the time they were ready to begin using the fertilizer.

The farmers are also unable to calculate most supply, production and marketing processes. They often do not understand the process by which ADO weighs their grain. They often do not understand the credit process — they cannot compute loan interest. They are unable to compute and compare sizes of inputs (and costs of such) with possible sizes of gains (and financial rewards). A majority of the farmers interviewed indicated that they did not really know how much fertilizer to use on their grain, and that those who did use fertilizer had learned how to use it through trial and error.

Farm Practices.....Sectional Differences

Farmers interviewed in Sayfong district indicated that most of the farmers in that area rented tractors at kips 1500 per rai to plow their land. This charge was an increase of kips 300 per rai over last year. The farmers in this area raised glutinous rice.

The farmers in Thadeua district indicated that although most of the farmers used buffalo for plowing and harrowing, some farmers did rent tractors. The farmers indicated that they raised mostly glutinous rice. They did not raise non-glutinous rice to any extent because they did not feel full if they consumed non-glutinous rice. Most villages indicated, however, that they raised small amounts of non-glutinous rice for the purposes of making Khaw Phun Noodles.

Saithany farmers in the southern section of the district raised glutinous rice and harrowed the soil with buffalo. In the section of the district immediately surrounding Vientiane, however, many of them rented tractors and/or buffalo to plow and harrow their fields. Many of the farmers immediately surrounding Vientiane grow non-glutinous rice. Many of these farmers had moved to Vientiane 20-25 years ago from Ubol, Korat & Khoen Kaen areas. They ate non-glutinous rice in the evening and glutinous rice in the morning. Most families, as in other districts, raised enough vegetables, poultry, swine and cattle for home consumption.....with occasional small sales.

Nasaithong farmers near Vientiane and near Ban X-Lay raised some quantities of non-glutinous rice. One farmer near Vientiane even indicated that he raised only non-glutinous rice for sale and purchased glutinous rice to eat. Many of the farmers near Vientiane also came from Thailand many years ago. Farmers as far as Phone Hong district note that they often hire Thai to work for them in their paddy fields. Refugees are also hired for field work at the cost of kips 300 per day. Several villages in this district raise rather prodigious amounts of cattle.

Phone Hong/Phanthaboun/Thourakhoum farmers raised mostly glutinous rice. Sizeable amounts of tractor use is prevalent in these areas. Phone Hong has larger amounts of tenant farmers than in the other areas surveyed. The land rented, however, is rented from large Phone Hong landlords rather than from Vientiane-based absentee landlords. The prevalence of large amounts of cattle and buffalo is also quite evident in these areas. The RLG extension agent in Phone Hong has made a much more noticeable impact on the area than is true of tenants in other districts.

What might be emphasized here is that -- from area to area -- although there are differences in amounts of glutinous and non-glutinous rice raised, differences in numbers of animals raised, differences in consumption habits, soil fertility, mechanization and land tenure; there have generally been no major changes in wet season farm practices within the various sections for a substantial amount of time....other than the beginning of the use of fertilizer in a few areas and the use of tractors. Henceforth, the various necessary mixtures of modern practices have not effectively reached and/or been accepted by individual village areas.

Incentives/Motivations/Barriers

Although most of the farmers interviewed did not mention the cost of fertilizer as a major obstacle concerning its acquisition and application, we feel that the cost has probably been a major obstacle. Even the farmers who profess to use fertilizer on their fields admit that they do not use very much fertilizer. They will then often voice the opinion that the fertilizer is very expensive. Since their level of literacy offers them no opportunity to calculate input vs. gain, they are usually hesitant to invest cash money in a venture whereby they cannot calculate returns....and, worse, where it may be obvious to them by the lack of volume in their granaries where they have lost cash money. It well may be that the villagers will have to be fully cognizant of gain (most likely in volume of grain reaped) from two to three times above the normal yield before they are convinced of the worth of the application of substantial amounts of fertilizer. This presents a major problem when considered in terms of the villager's hesitancy to even try!

A recent USAID study notes that the problem is, " basically one of motivating the farmer -- creating in him a desire to produce more so he can buy some of the material things he wants -- a metal roof for the house, a radio, a bicycle or a motorbike. These are ingredients of development." 3/

However, our feeling is that the Vientiane plain farmer, given his age, his background, traditions, and way-of-life, is quite satisfied with what he has at this point. To a large part, he has a metal roof (or doesn't particularly want one), he has a radio (or doesn't particularly want one -- he would no longer have an excuse to visit Thao Bounmy in the evenings -- part of his social life would be destroyed), the size of an investment in such as a motorbike, with continuing costs of operation vis-a-vis his need for one, does not cause any urge to buy. He lives very cheaply ---- not because of necessity, but because of choice. His life-style is that of anti-conspicuous consumption. The farmer does not want to indulge in what his neighbors may consider frivolous purchases which are not of vital necessity. Indications of his excess wealth would contribute to social pressures for the villager to contribute more to such things as the school, the wat, poor relatives, etc., than he is desirous of so doing. He trusts no one other than his own immediate family and has no desire to contribute to any projects other than those that directly benefit his nuclear family.

The villager hesitancy to live ostentatiously is also noted in studies of the Lao "cousins" in Thailand. One particular study notes that a discernible trait in Thai villages is not that of "keeping up with the Joneses" but rather of preventing the Joneses from getting above the accepted levels. It is not uncommon, at least initially, for the village to ostracize a peasant adding spectacularly to his worldly goods and even relieve him of a few possessions 4/

A study of the Lao villager in 1966 quotes from a conversation, "Even if more rice is grown with the same amount of every output what will happen to profits? Perhaps marauding army groups will take it or unfair government officials may commandeer it. Robbers are everywhere and one does what he can to hide opulence for fear of inviting them. These are bad times to excite other peoples" issa (envy) by getting more than one's due, for bad luck can follow swiftly on thoughts of this kind." 5/

Hence, the farmer's reluctance to allow any indication of possession of wealth. All of the farmers are desirous of making more money; often not for the reason of purchasing more things, but rather for the purpose of keeping more stashed away in hiding. His urge to add more to what might already be a sizeable hoard, will quite often not transcend his desire not to take any chances of diminishing that hoard.

It has been said that "Farmers the world over are very conservative. They are this way out of necessity. Farmers living under subsistence conditions are particularly reticent in trying new varieties of seed or new cultural practices. He knows he can produce enough to eat with the old varieties and old ways. A crop failure is disaster and means starvation for the family."

However, one must submit the question as to whether the Vientiane plain farmer should be included under the category of subsistence farmer. Most of the farmers interviewed indicated that their village sold at least some rice to the Vientiane rice mills or ADO. Moreover, in no areas where they have experienced flooding for two and three consecutive years, are the villagers yet in a position where they must buy rice for home consumption. There are also indications that secondary cash incomes in most of the areas are substantial. The topic of secondary cash incomes will be covered in a later section of this paper. Hence, the writer's thesis is that the Vientiane plain farmer, rather than being conservative because of the necessity of eking out a subsistence living from year to year, is conservative because he has not yet been given a positive indication that he can maximize earnings and add to his savings by changing the modus operandi of his present operations.

4/ Ronald C. Nairn, International AID to Thailand, The New Colonialism?, Yale University Press, New Haven and London, 1966

5/ Kenneth G. Orr, "The Lao Farmer and the Proposed Artificial Fertilizer program in Laos, "Research Memorandum, December 12, 1966.

Past programs charged with promoting change in farming methods have unfortunately not been overly successful. Regardless of what might motivate the farmer to accumulate additional wealth, efforts to unculcate a confidence in him that new methods would be more successful than old have mostly been for naught.

The program to promote the use of fertilizer will obviously receive no laudation for efficiency and effect. In most cases, the fertilizer has been delivered to a central point in the village. In some cases, the ADO agent and/or RLG extension agent has verbally explained to the villagers the benefits of fertilizer and how to apply it. In other cases the fertilizer has merely been delivered without any technical advice. In virtually no place other than in Phone Hong, did the surveys uncover an instance where the farmers had been taken by had to the field and showed how much to apply on a given area of land....using physical examples and speaking in terms and measures the villager could understand. In very few places other than in Phone Hong did the surveys uncover an instance where, after initial deliveries of fertilizer, a technician made second and third visits to ascertain the relative success of fertilizer application and to discuss problems which may have arisen. However, it must be noted that the Phone Hong area has more villages clustered in a smaller area than the other districts. In most villages, the extension agent visited the village only once a year for purposes of talking with the Nai-Ban or taking a survey. No discussions were held with the village body of male farmers as a group. Henceforth, the large body of farmers had no confidence in how to apply the fertilizer and usually proceeded by the trial and error method. This either resulted in damaging over-applications or unsatisfying under-applications of fertilizer. Results of neither trials imbued in the farmer an overwhelming desire to continue fertilizer applications in terms that would maximize yields.

Farmer-leader training sessions and farmer-tours could also not be viewed as being too successful when studied in a cost-benefit analysis. The survey indicated that although some training programs had given some of the village leaders a knowledge of fertilizer and its application, these leaders were not sufficiently confident in the possible rewards so as to promote the use of fertilizer among other villagers. It might be noted that the Lao farmer retains feelings of independence and suspicion to such a degree, that he is very very slowly influenced by neighbor villagers. The leader, also is wary of being the vehicle of promotion. He knows, that if something goes wrong, he will be blamed whether he is responsible or not. In 1967, the Nai Ban of Kong Kham in Borikhane Province encouraged the villagers to join in a group pump irrigation project with him. When the project proved unfeasible through no fault of the Nai-Ban (Who had been Nai-Ban for 22 years), the people of the village held him responsible. He was later forced to move to another village.

In some instances, village leaders may actually help freeze a situation which must be broken somehow before agricultural innovations are widely discovered, some such leaders may need to be discovered, not in order to employ them like Moses in leading their people out of a prescientific wilderness into the technological promised land'— but rather in order to neutralize their influence as living embodiments of an outmoded culture. 6/

The demonstration plots were also usually unsuccessful. Some farmers noted that they weren't interested in them. Other farmers, such as at Phone Mi/Phone Hong and Ban X-lay/Nasaithong said that the demonstrations were failures. Nearby

farmers raised better rice than that in the demonstration plot. Other demonstration plots had been promoted without the knowledge of the farmers and they henceforth did not understand the objective.

5/ T. R. Batten, *Communities and Their Development, and Introductory Study with Special Reference to the Tropics* Oxford University Press, London, 1957.

Lastly, the Project of Functional Literacy of Vientiane plain Farmers notes, "Without ensuring that the cause and effect relation is direct between education and economic growth it however appears that in human attitudes and aspirations, the taste for modernization which is essential to economic growth, can be detected only when the person has attended at least 4 school years, level of which is aimed at by functional literacy."

Soil Conditions

The difference in soils seems to have had much to do with acceptance and/or non-acceptance of fertilizer in most of the areas. Farmers in areas with poor soil generally indicate that they use fertilizer. Notwithstanding fear of floods, farmers in areas with good soil generally do not use fertilizer. If they use the fertilizer, they complain that the rice becomes "ngam photo" at the Salakham station note that if the farmers used the fertilizer correctly, they would not experience the problem of lodging).

Farmers in these areas have not been exposed to rice varieties which would accept applications of fertilizer and produce high yields without lodging.

The flood plain areas adjacent to the Mekong River in Sayfong and Thadeuz districts and small portions of Saithany and Nasaithong districts have rich soils where the farmers use little or no fertilizer because they note that the local variety of rice they grow cannot transform applications of fertilizer into higher yields.

Insect Infestations

Saithany and Phone Hong districts have had a major complaint concerning damages caused by insects. The villagers were not aware of the cause of the damage. The damage, however, was probably caused by the Gall Midge, an insect. This insect lays eggs on the plant, which hatch and attack the plant so quickly, the application of insecticides or control measures is virtually impossible.

The villagers are bewildered by the destruction/loss of their grain. They say that they have never experienced a similar problem. One villager in Phone Hong admitted that he had the trouble before, but never in such large proportions. Most of the villagers note that they have lost one half of their crop this past year. The loss was quite extensive in Phone Hong and southern Saithany.

A few villager in Saithany and many villagers in Phone Hong are questioning the possible relationship of fertilizer (which they have just begun to use) with the onslaught of "Boua" (which they have never experienced before). Some of the farmers are convinced that there is a direct relationship and have henceforth decided not to use fertilizer again. Other farmers argue that those who use fertilizer and those who did not nevertheless had trouble with "Boua." The

deciding factor was that the users of fertilizer were more afflicted than the non-users.

The extension agents had observed the crops in both areas, but had not informed the villagers that the probable cause of the loss of yield was an insect infestation.

Village Health

Although the role of sanitation and good health practices in the rural villages is difficult to measure in terms which would allow indicators as to its precise impact on production -- primarily the impact of lost opportunities -- the impact of poor health on middle-aged and/or elderly men charged with major responsibility for production can well be imagined. The debilitating effects of malaria, fevers, colds and other diseases would necessarily be considered in isolating various barriers to increased production by the rural sector.

The spring of the year, when the rains come, is a particularly difficult time. The old farmers must spend long hours in changing weather. They are weakened by the exhaustion of their work in the steady rains. They are particularly susceptible to sickness at this time.

Henceforth, the extra effort needed to produce the extra amount of crops is often not forthcoming. Although the females of the family often help with the planting, the males are usually responsible for the plowing and harrowing of the land. If the male cannot prepare extra land, extra rice will probably not be planted.

Coordination of Programs

Vartious units of the RLG have not cooperated or combined efforts in an attempt to encourage the Vientiane plain villager to become more efficient in production.

ADO has been the agent of supply for fertilizer and the purchaser of grain. ADO has also quite often been the only agent available to explain the utilization of the fertilizer to the farmers. There has been no coordinated program whereby RLG extension service preceded and followed the distribution of fertilizer to the countryside with discussions, physical demonstrations and follow-ups.

The office of Chao Muong and Chao Khoeung, in most cases, have not been involved in the promotion of improved methods of farming.

The irrigation projects along the Mekong River have claimed most of the attention and efforts of extension agents assigned to Muong Thadeua and Sayfong. Villages on either side of pump irrigation projects have reported that their village never has any contact with RLG extension people. The irrigation projects, moreover, give no evidence that they have helped promote any new methods of farming which are applicable for increased production in the wet season.

There is no evidence that there has been any program with any amount of

success whatsoever which has introduced and promoted any new glutinous or non-glutinous rice varieties to which substantial amounts of fertilizer can be applied resulting in significant increases in grain yields.

A distribution of extension agents along the historical political make-up of the village and Tasseng has obviously not been followed too closely. Most of the extension agents are assigned to district capitals, where with insufficient motivation to work intensively in the countryside, they often languish.

No unit representative in the countryside is, in reality, responsible to any other unit representative. He is often responsible only to his supervisor either at district level or (usually) at Vientiane. This means that the Chao Muong or Chao Khoeung have really little more than titular power in their areas. Supervision of unit representatives out of their head offices in Vientiane is perfunctory at best. They are ill-prepared and ill-motivated....and per-diem is not the answer!

Secondary Cash Incomes

The villagers indulge in impressive amounts of various cash-bringing activities. Although no estimate could be made at this time of the amounts earned by a typical family from non-rice activities, the activities suggest strongly that the Vientiane plain farmers do not belong in the subsistence class.

The activities also suggest that programs which might be initiated with hopes that the farmer would diversify, would probably necessarily compete with other cash-bringing villager projects. What level of profit must be offered the farmer for labor/capital/time invested to encourage him to forego the old practice for the new? What villager valuations might hinder the diversification process....
...i.e. fishing is enjoyable, cutting firewood enables the farmer to hunt at the same time, the farmer is old and does not desire strenuous work, etc.

The activities include:

Vegetable growing....Various plants are grown in Thadeua, Sayfong, Saithany and Nasaithong in small amounts for sale in Vientiane.

Poultry production.. A few large producers exist near Vientiane city. Otherwise most villagers raise from 2-15 birds for home consumption and occasional sales.

Tobacco..... Farmers in Sayfong and Thadeua raise considerable tobacco in the dry season. Some farmers near Sene Dinh/Nasaithong grow tobacco which is sold to merchants from Pakse and Savannakhet. Those merchants transport the tobacco. Some villagers along the Mekong River North near Ban Ang in Nasaithong district grow tobacco which is sold in the Vte. market and across the river in Thailand.

- Fishing..... Many farmers living near the Mekong and the Nam Ngum River periodically catch fish for sale. Also, many villagers living near fish-laden streams and ponds catch fish for sale and/or production of Padek and subsequent sale.
- Basket-weaving.... Many of the Phone Hong cluster villagers weave baskets for sale.
- Firewood cutting.. Many of the villagers of Thadeua, Saithany, Nasaithong, and the non-cluster area of Phone Hong, Ban Keun and Phanthaboun cut firewood for sale.
- Timber cutting... Villagers in all areas except Sayfong and other congested areas such as Phone Hong cut timber for sale.
- Charcoal..... Farmers in heavily wooded areas often produce charcoal.
- Salary..... Nearly every village in Sayfong, Saithany and Nasaithong districts ... in a 10-15 kilometer radius ... has a very sizeable portion of the male population engaged in cash-bringing activities in the city of Vientiane.
- Animal raising.. Most villagers raise some buffalo. These buffalo are occasionally sold and/or rented. Villages with ample range land also raise cattle. These beasts are usually sold. Many villages also raise a few pigs.
- Double cropping... With the exception of villages in Muong Sayfong, most places grow small amounts of highland rice. Also, a number of villages near the Mekong raise dry-season rice by utilization of pumps on the river.
- Lao whiskey.... Several villages in the plain realize sizeable income by making Lao whiskey for sale and feeding swine with the mash.
- Pigeons..... One village near Vientiane raises pigeons for sale to Vientiane Chinese restaurants.
- Roadside stands.. Most villages located along the roads have several "stalls" where snacks, soft-drinks, beer, cigarettes and candy are sold.

Marketing

ADO has previously been the major purchaser of rice. A few villagers complained about the method ADO utilized in weighing the rice. They complained that they had been cheated on the weight. This complaint, however, was not widespread.

ADO had been to almost every village in the drive to purchase rice. The Nasaithong rice mill, however, did most of the buying in that area.

There was, however, no evidence of vigorous campaigns by the rice mills to encourage the farmers to grow large amounts of rice and then sell it to the mills. They do not, as in Thailand, peddle fertilizer, encourage the use of fertilizer and also inform the farmers of the varieties of rice they need and want to buy. When the rice mill purchases rice, it sends an agent to each village searching for farmers who have rice they wish to sell. The Nasaithong mill manager noted that the villagers usually just sell a small portion of the amount they have on hand at a given time --- if they need money for something. If, at a later date, they need more money, they sell more rice.

Manpower Drain

As previously mentioned, the male population in the Vientiane plain is middle-aged to elderly. The younger males have mostly been drafted for service in the army. Female power abounds, but it is often not utilized fully. The women, if residing in a village of reasonable size, will spend the entire day selling a few packages of cigarettes or cookies. Otherwise, they will engage in child-care or idling. One village, Nam Kieng/Nasaithong has utilized the female populace by engaging them in the raising of pigs. Many houses in the village have a goodly number of pigs. In villages near streams and ponds, the women quite often spend considerable time fishing.