

ARNO FARM: REPLANTING FOR SELF RELIANCE

Final Project Evaluation - Micronesia and South Pacific Program
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PART 1

My counterpart, Alexander Laukon, was very cooperative throughout the project but he was transferred from the farm during the last few weeks of the project and we were not able to complete the evaluation together. Some of the information below was obtained from Mr. Laukon during the course of our work.

Goal 1: Inventory equipment, facilities and supplies and prepare a list of necessary repairs.

We inventoried the equipment and supplies in the first few weeks of the project and we made several lists of needed materials and repairs which were communicated via radio to the office in Majuro. We followed these requests with written memos to the Chief of Agriculture explaining what was needed and why.

The chief skills transferred in achieving this goal were learning to inventory, analyze problems with equipment, communicate them to our supervisor and then follow up with persistent written and verbal requests for the necessary repairs. While the equipment had been in a state of disrepair for several years, no concerted effort had been made to get it fixed. In the past, problems were related to the supervisor with no results. There was no follow-up on the part of the counterpart. We learned together that if we wanted something to get done we needed to follow it up consistently and persistently.

Mr. Laukon demonstrated that the skill had been transferred when he took it upon himself to become more pro-active in his dealings with repairs. He made lists of repairs needed and followed up on them, contacting his supervisor to get status reports and making sure that the repairs were proceeding.

Goal 2: Prepare a plan of the farm, its buildings, beds and planted areas.

The Arno farm team, composed of the counterpart, TA and JTPA workers measured and plotted the location of the major features on the farm. The plan was drawn up and reproduced with the cooperation of the Lands Division of the Ministry of R&D.

I worked one-on one with the JTPA workers in an effort to get them to practice their English language skills and to teach them about basic surveying. After working on the project for a short time, the team members understood the process and became involved in deciding what would be measured and how. While the actual drawing up of the plan was accomplished in Majuro, away from the team, they demonstrated an understanding of the process and the importance of the product.

Goal 3: Work with the Chief of Agriculture and the staff at the Laura farm to secure seeds and plant starts and schedule their delivery.

During the course of the project the Arno farm team obtained seeds, and planted and raised vegetable plants for distribution. We also scheduled the delivery and carried out the planting of 2,346 taro setts, 486 banana plants and 295 breadfruit cuttings.

Specific skills transferred included communicating with the Laura farm and our supervisor in Majuro, scheduling planting and sowing projects, planning our seedling distribution project, and following up on shipments to make sure that they were on schedule.

At the beginning of the project, my counterpart was very passive about the planting project, planting when the materials arrived and not pursuing a plan or schedule. Within a month he began to make calls to Majuro to check on shipments and follow up on seed orders. By the end of the project we had improved the scheduling of work on the farm to the point that we knew when shipments would arrive and we had planned our other work around them. Mr. Laukon became more pro-active in his approach to the work on the farm.

Goal 4: Prepare beds and nursery areas for raising vegetable seedlings and food crop starts.

We succeeded in developing a large nursery bed for the vegetable demonstration project and we prepared several thousand square feet of land for planting banana, taro and breadfruit.

The main skills transferred during this phase of our project were crew scheduling, bed layout and construction and general farm planning.

We developed a schedule for the bed development project and my counterpart and I discussed at length the future layout of the beds and fields. Mr. Laukon then decided where the next beds would be developed and which fields would be prepared for subsequent plantings of taro, bananas and breadfruit. Toward the end of the project, his decisions took into account factors which it seems that he had not previously considered: proximity to the irrigation system, quality of the native soil, previous crop success and issues of interplanting. He made better informed decisions and his planning skills improved markedly.

Goal 5: Develop a yearly schedule for seedling production and distribution.

We developed a yearly schedule for seedling production and distribution which took into consideration the rainy/dry cycle and the staffing level at the farm.

One of the most difficult aspects of developing plans with my counterpart was helping him to see his work in cycles. The farm scheduling and general planning had not previously been responsive to the wet/dry weather cycles and seedlings were produced for distribution on a random schedule. Mr. Laukon and I discussed

the seedling and distribution schedules at great length and agreed that making seedlings available on a regular schedule would be best. However, the final production schedule was not laid out before Mr. Laukon was transferred from the project and the majority of the schedule development work was done by me.

Goal 6: Coordinate with the Ministry of Social Services to schedule gardening and cooking demonstrations on the farm.

This was our most optimistic goal because it was predicated on the cooperation and mutual support of the two ministries. This part of the project met with two serious hurdles: we were not able to get seeds from the Laura farm in a timely fashion and; there seemed to be a lack of willingness among the R&D employees to work with people from the other ministry.

The seed order which we placed for this project was "lost." and when we were finally able to secure the seeds, it was too late in the course of the project to produce vegetables for demonstrations.

In an effort to set up the program so that it might begin after I left, I scheduled a meeting between Ministry of Social Services employees, my counterpart and me. My counterpart did not show up for the meeting and he was subsequently transferred from the Arno farm project.

Goal 7: Work with the RMI EPA to safely dispose of the pesticides at the Arno farm.

We achieved much toward this goal but the pesticides remain at the farm. Mr. Laukon and I discussed the dangers of the pesticides and the fact that they should not be used on the Arno farm. I related to him the problems with possible groundwater contaminatin from their use and we agreed to inventory the chemicals and transport them to the EPA for disposal.

One of my goals in this part of our work was to teach Mr. Laukon and the JTPA workers about the dangers of pesticides and about how to handle them safely. Disposal of the chemicals was delayed until we could get the proper safety equipment for the handlers: dust masks and rubber gloves. When the pesticides were inventoried, bagged up and labeled we were delayed again while the Chinese agriculture workers at the Laura farm decided if they wanted the chemicals. We scheduled to transport the chemicals to Majuro during the second week of September but my counterpart was called to Majuro for two weeks and we weren't able to complete the transport on schedule.

Specific skills transferred included knowledge of the safe handling and disposal of pesticides and working with the EPA to arrange for their disposal. Mr. Laukon demonstrated his increased understanding of pesticide safety when he supervised the JTPA workers in the handling of the chemicals. The JTPA workers also learned about pesticide safety as demonstrated by the fact that they began to use rubber gloves and masks whenever they handled the materials.

Goal 8: Work with the Chief of Agriculture to get necessary equipment repaired, including water pumps, vehicle and tiller.

By the end of the project we had been able to bring about the repair of the tiller and one of the farm's water pumps. We made some progress toward repairing the second pump and had located the necessary parts to complete the repairs. It became clear that the Chief of Agriculture had no intention of having the farm pickup truck repaired.

Skills transferred included general plumbing and electrical repairs, and how to make repair requests and the requisite persistent follow-up requests. Previously, Mr. Laukon had made verbal requests for repairs which rarely resulted in any action. Together we made written requests for repairs, transported equipment to Majuro and followed up our written requests with calls to Majuro. As with other aspects of the project, the follow-up was very important and by the second half of my stay Mr. Laukon was himself making the regular radio calls to Majuro to find out what had happened to our repair request.

Other Skills Transferred:

As mentioned above, I also worked about 30 hours per week with the JTPA workers on the Arno Farm. There were three workers at any one time but I worked with a total of six workers during the course of the project. Skills transferred in my work with the JTPA workers included English communication, use of the English/Marshallese dictionary, techniques for planting taro, bananas and breadfruit, plant nursery techniques, composting, surveying and measuring and general good work habits.

In addition, I worked with Jackie Kijrik, Chief of Programs and Project Development in the R&D office in Majuro. I taught Mr. Kijrik how to use a digital scanner for his document digitalization project and worked with him to improve the efficiency of his Macintosh computer system. Specific skills transferred included scanning and storage of documents, management of digital files, use of character recognition software, and general troubleshooting and organization of the computer system.

I also worked with Isamu Labin, Assistant Chief of Agriculture to produce the Banana Pit Development brochure. Mr. Labin and I pasted up the graphics and text, and completed the final production of the flyer. Specific skills transferred include layout and pasteup techniques and reproduction of the flyer.

PART 2

New people contacted by my counterpart included the Mayor of Arno and staff at the Ministry of Social Services.

PART 3

Written resources used by my counterpart for the first time (in order of usefulness):

Euselio, J., ed., 1986. Agriculture, Food and Nutrition in the Pacific Islands, University of the South Pacific, School of Agriculture and UNICEF, Suva, Fiji.

Laird, William E., 1989. Soil Survey of the Islands of Airik, Arno, Majuro, Mili, and Taroa, Republic of the Marshall Islands, SCS, USDA, US Department of the Interior, Washington, D.C.

Fundamentals of Soil Science, author, date unknown.

PART 4

I suspect that my counterpart would agree with me that the major challenges in accomplishing our goals were the general inertia in the Division of Agriculture, my lack of understanding of Marshallese culture and the Marshallese predilection for proceeding without planning. If I had understood at the beginning that some aspects of our project would not be supported by the Chief, we might have proceeded otherwise. I think that the signs were there, I just couldn't understand what was being communicated. Also, if I had understood the degree of mistrust or animosity that existed between the ministries of R&D and Social Services, I might have proceeded differently with the gardening and cooking demonstration part of our plan. If I had made all of the interagency contacts myself, instead of insisting that my counterpart be involved, we might have been more successful in setting up a cooperative project.