PEOPLES TEMPLE AGRICULTURAL PROJECT Progress Report-Summer 1977

Introduction

The Peoples Temple Agricultural Project was initiated by Rev. Jim Jones in December of 1973. He conceived of the project in order to assist the Guyanese Government in a small measure, to feed, clothe, and house its people, and at the same time to further the human service goals that have characterized Peoples Temple for many years. The government allotted 3,824 acres in the North West District near Port Kaituma to the project. In October of 1974 the first ground was cleared – a 30 acre plot that fell by hand and by machine, near the spot where 11 were housed in a bark cottage.

Hundreds of acres are now cleared and under cultivation, and housing for nearly a thousand people has been constructed, the last of the housing being constructed with our own pre-fabricated siding. The sawmill operates 24 hours a day. Other innovations include a cassava processor, a planter, and a hammermill temporarily in operation until the government mill in Port Kaituma starts into operation. We've acquired 9 vehicles, including 2 caterpillar tractors, a dump truck, a crane, 3 large farm tractors, a small garden tractor and a pickup truck.

The agricultural experimenters are learning by trial and error how to produce nutritious crops that, in some cases, have never been tried on jungle soil, and the settlers are learning the art of cooperative living in a wholesome, satisfying and challenging environment. Realistically, we can now expect that the farm will become self-sufficient within three to five years. In the meantime, Peoples Temple members in the U. S. A. are contributing to keep the settlement going through these initial years. We are cooperating fully with the government's plan to buy local products, and we have begun manufacturing our own clothing in accordance with this plan.

The agricultural results are especially heartening to those who have put their "labor of love" into the project during these first few years. Other programs now under way are equally exciting. An educational program provides a balanced curriculum for 135 children, ages 3 to 18. Some youngsters who were said to have learning disabilities in their former setting are quick and willing learners in this cooperative environment. Many of the most extensive projects are supervised by young people whose talents never had the the opportunity to develop before. Seniors who were wanting for something to do are now engaged in satisfying programs that enhance their sense of accomplishment in their later years. The cooperative kitchen, which serves three meals a day, produces nutritious and delicious recipes using homegrown foods. It also provides two snacks a day for several hundred people.

Guyana's healthy and pleasant climate (the temperature stays between 65° and $85^{\circ}F$. and the trade winds have a tempering effect), the wholesome atmosphere, and the constructive life style offered by this pioneering project have impressed us deeply with the role Guyana has to play in the future of the Caribbean and the rest of the developing third world. We are deeply pleased to be able to participate. The expectations of Rev. Jones and this government are stimulating our project to be a success of many dimensions.



Guyana: a brief note

Guyana, formerly the colony of British Guiana, achieved its independence in 1966. Though it is part of the South American mainland, Guyana has Caribbean cultural roots. The English-speaking population of nearly one million is mostly black and East Indian, in addition to native Amerindians, along with Chinese and Portugese inhabitants. Free from an oppressive heritage of slavery and colonialism, Guyana is undertaking to manage, develop, and control its own abundant resources. The nation is especially rich in bauxite. Though the majority of the population lives on the coastal plain, efforts have been underway to develop Guyana's rich interior. Peoples Temple's agricultural mission is part of that effort. It is the goal of the Guyanese government to insure that all of its population is adequately fed, clothed, and housed in the very near future. Though a young and relatively small nation, Guyana has taken a leadership role in the community of non-aligned nations pursuing a socialistic course.





MAJOR CROPS

Major crops include the bitter and sweet cassava, sweet potatoes, eddoes, papaya and dasheen. Here are brief descriptions of our experiences with some of these:

Eddoes: This has been one of our major crops from the start. We eat both the tubers and the greens. We had to clear the original planting site, which was thick jungle. The felled trees were left for a burn, and the first eddoes were planted between the burnt logs. We are now planting in well-prepared beds, 900 feet long, 2 feet apart, with good drainage ditches. Shells, TSP, and potash are applied for fertilizer. We are weeding frequently, and expect a very good crop this season.

Sweet potatoes: Sweet potatoes, planted last May, are currently under cultivation. Based on our previous experience, we are planting in beds, using drainage ditches, and fertilizing with TSP, potash, and urea. We are dipping the slips in aldrin before planting for worm control. Our last yield was 2 tons per acre, and we're hoping to top that with the current planting. Our second planting, in 1975, produced potatoes weighing 11 and 12 pounds. Since our crop of "better potatoes" was very fibrous, we are growing only sweet potatoes and yams at this time.

Bell yams: The first and second yam crops did not do very well. The third planting was therefore done in very rich soil, built up, and the current vines look very healthy.

Cassava processing: We are temporarily milling cassava in a mill designed by our workers, using materials we had around the project site. Once it is set up we will take our cassava to the government mill at Port Kaituma. We can grate 100 pounds of cassava in about three minutes using this homemade mill.

We collect bitter cassava from the field in open, 50 gallon drums, and wash them in the trailer wagon through the jostling action on the way to the mill. The grater is a heavy table, $3' \times 8\%'$, with a hole 12'' $\times 14''$ in the middle. Two iron pulleys welded together work the grater. The grater blade is made with a small three-cornered file, sharpened to make a small hole at half-inch intervals, with each row off-set to the last. We use a 5hp electric motor to turn the grater. One person puts the cassava in the grater, and another uses a cassava roof to push the cassava against the grater.

Grated cassava comes through the bottom of the mill into a tub lined with a plastic feed bag. This is then fifted to the press, which consists of two heavy truck wheel rims, 21" in diameter, with a solid

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bottom, except for a 2" hole for the juice to escape. Cassava is pressed against the sides of a cylinder which has slits cut about 4" apart and 6" in length. In the bottom is a set of 5 ribs, made of crab wood, 2" square with spacing to match. On these ribs is placed a lead cylinder to give better pressing effect.

The pressing plate is applied using a 10-ton hydraulic jack. It is set against a press frame made of wood timber. The cassava water drains into buckets and sits for about 30 minutes to let the starch settle to the bottom. The water is poured off into cooking vats and then boiled slowly for a few hours. It is strained through cheesecloth, then slowly boiled again until cooked down to a heavy syrup called *cassareep*. This is used in cooking as flavoring. The starch is also used in cooking, and to starch clothes.

The pressed cassava is put back through the grater and ground again, then dried on the floor. It is now about 40% of its original weight, and is mixed into pig feed. About 1,000 pounds of cassava produces 170oz. of cassareep; 100 pounds of cassava will make 50 cassava breads, 18" in diameter.

We have grated and pressed sweet potatoes by the same process as the cassava, producing a substance slightly sweeter than cassareep. We dried the processed potato. Some of the Guyanese have used it for porridge, which they said was very good. We have also produced a sweet potato flour which, mixed with eggs and fried in small cakes, has a meat-like flavor. It could easily be used as a meat stretcher. It can also be stored for periods of time in this flour state.

GARDEN CROPS

In addition to the major crops, we grow all the vegetables we need for the settlers, including cucumbers, bora beans, cabbage, lettuce, and others. They are all doing well.

FRUIT ORCHARD

We are developing a fruit orchard including many fruit trees native to Guyana. The trees are healthy and bearing well, though the fruits are still small because the trees are young. Our citrus orchard includes about 3,500 to 4,000 trees. We are also growing extremely healthy, fast-growing cashew trees.

Pineapples: Pineapples are thriving alongside the road leading into Jonestown. Because suckers were not available at the time of our first planting, we planted tops which we collected wherever we could find them. From our first crop we planted 600 suckers. Being large in size, these suckers quickly produced, but the fruit was small. We are now planting only small suckers or tops, which will delay the fruit for a year or two, but should produce larger sized pineapples. A third crop of 1,000 suckers was planted, and another crop of 1,000 is ready. We expect to produce beyond our own need in the near future.

Bananas: We are harvesting an average of 2,000 pounds of bananas each month. We first planted approximately 3,500 banana suckers in a mile stretch alongside the road into Jonestown. We discovered that plantings done in the rainy season did not come up, and only those planted in windrows would last. We have not used an insecticide to date, relying instead on ash from the burning and rotting wood to reduce the incidence of insects. This combination has also served to fertilize, so we have added fertilizer only once in nearly three years. Three delicious varieties of banana are bearing: apple, cayanne, and fig, plus plantain. A propagation field has been developed for rapid growth of suckers. We have started a few dwarf cayanne trees and five black banana suckers.

EXPERIMENTING

Experiments with garden crops are conducted to test non-commercial fertilizers, utilizing ingredients "produced" at the project site. Onions, and some legumes such as mung beans, are examples of crops under experimental cultivation. We are also growing coffee. Sea shell, manure, and compost are distributed on one acre plots in 2 ton, 4 ton, and 6 ton quantities. Results show how much fertilizer is needed for best growing conditions. Long garden rows are measured for best proportion to the acre.

Generally, experience has shown that cultivars are acclimating, growing stronger with each crop. For example, the star-leaf sweet potato took seven months to harvest the first time it was planted. The last crop was ready for harvest in only 3-4 months, and some, the size of medium-sized grapefruit, were ready in 2 months.

Cutlass beans: In the face of warnings from some local people that the cutlass bean would make people sick, we have successfully cultivated it and turned it into delicious foodstuffs. The government analysis station in Georgetown reported it was a good source of protein. We also use it for stock and animal feed and green manure. If we have enough seeds, we roast them for excellent snacks. The vine, which is also high in protein, is used for animals only at this time, but we expect to develop recipes using it for the settlers as well. Its excellent qualities were discovered when someone "took a chance" and ate it. It is a particularly valuable crop because it will grow anywhere, any time, and in any weather, requiring only one weeding and little fertilizer.

A HOME MADE PLANTER

Using odds and ends from around the project site, like bicycle sprockets and chain, we created a mechanical planter that enabled us to plant 5 acres in an 8-hour day. We have since then converted our spring-tooth cultivator into a planter that covered the 5 acres in $3\frac{1}{2}$ hours, using one driver and four other people. This job previously took 20-60 workers 3 to 5 days to complete.

Here's how we did it: We reset the cultivator tines to match the furrows made by the wheel. Then we made a seat of boards that sits on top of the cultivator, large enough to hold four people at one time. Three-foot hoses are connected to the tines at one end, and to funnels made with cut-off plastic bleach bottles at the other end. The seeds are dropped through the funnels and the hoses to a pan set on the tines, from which they are dropped to the furrows. Another tine then follows to cover the furrows. The planter addition can be removed in one piece when the cultivator is needed for its usual purpose.

We similarly fashioned a homemade corn shaker, using wooden frames with mesh screens to shake the corn so we can clean out broken pieces of cob.



Experiments in Planting

BUSH TEA

We have been introduced to many bush teas by the Amerindians. The list consists of Sarsaparilla, Cupa, Locust Bark, Rose of the Mountain Bark, and Copadula. We started out making it as time permitted. Now, we substitute it for regular iced tea at supper. We add sugar and mint to taste, and we've found that it is good for the back and also as a diuretic.

WINDROW PLANTING

We have found that many things grow well in windrows. The only drawback is the control of weeds. As suggested by Guyanese, we grow watermelons, tomatoes, squash, hot peppers, cucumbers and papayas. All do well when properly weeded.

Papaya planting: To date, we have had the best results with papayas when they are planted in windrows. We will continue to plant in the windrows, but we are presently experimenting by interplanting with the eddoes. (These are eddoes without germination.) We will try orchard planting soon. We have found that manure helps to bring more and bigger fruit.

Asparagus: Our asparagus has been growing here for over two years. We got one seed to grow from a package and then the roots multiplied up to 36. We finally got some of our own seeds to grow and we now have 140 new plants started. The adult asparagus is growing the size of an ordinary man's middle finger.

Celery: We have been getting some medium-sized stalks so far. We are now preparing a seven-row flat area, with heavy organic matter. We will flood this area with water most of the time. This should give us normal-sized stalks.

Egg-plants, or Boulangers: Boulangers have been a good supply of food. The plant has to be fertilized every two weeks with potash and urea. We are also trying to breed our own type of boulanger because we have a more difficult time getting seed to reproduce in kind. We prefer the local variety.

Experiments with beans: We have a bean program aimed at finding out which kinds grow well here, and which type grow well in wet or dry seasons. Bora beans do very well in either wet or dry seasons. The exception is the hard bora bean, which still grows well in wet or dry seasons, but doesn't produce during the wet season.

We have found a black bean which is both a snap bean and a dry bean, which grows very well during the rainy season. We are now experimenting with the Winged bean. The Pinto bean grows well here, in the normal growing seasons. It is a very good eating bean. The Blackeye and Kidney beans are handled by the main farm crew. We are developing the Soybean seed from a type that has been growing for six generations.

Tomatoes: Although we have grown some in the windrows, we have had a raised earth section supported by aluminum roofing and a plastic canopy. This cover has been effective in keeping out the rain. The tomatoes grown here have been very high quality.

Carrots: These have also been grown in with the tomatoes, with varied success.

Cucumbers: These grow well with plenty of water, but they have to be planted before the rainy season starts for them to grow. They require plenty of potash and urea.

Onions and Shallots: The only way that we have had success in growing onions is to plant the adult onion, and have it multiply just like a shallot. Shallots grow well here with adequate fertilization. We add TSP after 21 days.

SEEDLINGS

We have used both seed boxes and seed beds to start seedlings. Both have worked well. The drawback is that, in the rainy season, there is too much damping off. The lack of sun is the worst problem. We intend to build a hot house in order to grow seedlings during the rainy season.

Soil Preparation

We have started a long range program to improve the soil. We are digging a pit the length of a row four feet wide and three feet deep. In this way, we bury off the fall from the food processing pavillion. This improves the soil at a deeper level than is possible with other methods.

FERTILIZATION

Soil testing in corroboration with the government's soil survey has shown the need for shell, manure, and TSP as the most effective combination for planting most crops here at Jonestown.

Shell as fertilizer: Dr. Teijens, who has done a large amount of work with various state agricultural experiment stations all over the U. S., has prescribed the use of unburnt limestone at the rate of 4 tons to the acre as a minimum for clay loams. The many benefits include ion-exchange which makes use of the clay, and the humus, to hold back minerals which were being dissolved and washed away with the heavy rains. Shell dissolves slowly and has the additional quality of soil conditioning by helping to form small granules of earth for good tilth.

COMPOST

We used a fast method for making compost, which was devised by Dr. Clarence G. Golueke, in his graduate studies at the University of California. There is a paperback booklet which has been our reference. Our procedure has been as follows:



1. Materials

- a) carbonaceous; fallen dead leaves from the jungle.
- b) nitrogenous wastes; banana stalks chopped fine with a cutlass.
- 2. Material proportion in pile
 - a) two parts carbonaceous waste 8" layer.
 b) one part nitrogenous wastes 4" layer.
- 3. Moisture content
 - a) the ideal moisture content of the compost pile is to range from 70° to 80° when leaves are used as the absorbent.
- Preparing the compost (the pile should be at least 5" high to begin to heat up.)
 - a) We used a combination of three hins, each adjacent to the others. On the first day, we loaded the first bin. We turned this bin into the second bin 48 hours later, and started the first bin. From this point on, we turned the bins each 48 hours, four turns for each pile. Then we let them sit for 14 days.
 - b) If all the conditions are right, the temperature reaches $120 \, \text{F}$ in two or three days and $150 \, \text{F}$ in five or six days.
 - c) At the end of 14 days, the temperature drops to 100°.
 - d) A drop in the ph (acidity) takes place at the start, and the pile soon becomes alkaline; a ph of 7 (neutral) is desirable. Lime should not be used as it promotes the loss of nitrogen to the air.
 - e) We covered the bins with a roof at least 6' beyond the bins to control the moisture content and the temperature of the pile.
 - f) The compost is now ready to be put into the ground.



Nursery

The nursery was started by gathering all the seeds, seedlings, small trees and plants that we could obtain in the North West region. Some of the seeds for fruits were started from purchased fruits. At our first opportunity, in Georgetown, we collected many more varieties, both small trees and cuttings. We have gradually added new types of fruit trees to the list. We built a nursery building to cut down on the amount of sun on young trees. We built waist-high tables to keep the young trees in an organized manner.

POTTING SOIL PREPARATION

We used pen manure mixed with shell and the rotted wood. We also added any other organic matter we could find, plus a little TSP plus some topsoil. This was the mix we used for the pots. Just before the trees became rootbound, we planted them out in the ground. (We had cleared the land previously, in preparation for the young plantings.) The area around the nursery which has been used for an orchard, was planted in five different sections as clearing proceeded and as plants came of age for transplanting. We still use sections of the nursery to propagate sugar cane, bananas, and citrus fruits, as well as pineapples.

The total area covers five acres, and many of the trees are now bearing fruit. Here are the trees and flowers now growing in our nursery:

sugar cane,	
grenadilla - vines all over the area	
breadfruit	
calabash	
sugar apple	
soursop	
five fingers	17
source	10
gooseberry	19
French cashew	20
cashew nut	14
jamoon	5
Barbados Cherry	
annattoo	2

almond
guava
pineapple
coconut
mango
pomegranate
rose plum
mammee apple14
Bouganvilla – all colors
avocado
flambovant - all over Jonestown
red leaf bush
bamboo — many starters
tamarind

There are other fruit trees of lesser value. Aside from these plants, there is a large section for citrus only, and there are more trees in the citrus variety, including Shaddock, which is a large grapefruit with red flesh.

Livestock

CHICKEN PROJECT

Two years ago we attempted to raise chickens in the tropics. We were unsuccessful due to our lack of experience, and incorrect housing construction. Over these last few years, we have gathered information on the raising of poultry, and we received important information from local veterinarians and the local Agricultural officers.

With the information at hand on building the homes, we chose land that was on a slope, with well drained ground, about 1½ miles from the main house.

For buildings, we have built eight gable-type chicken houses, $24' \times 18'$. These are constructed out of raw material from the bush. They are round pole construction, with gutters along the roof to provide water, with drains which flow to tanks of from 50 gal. to 20 gal. The 20 gal. tank has a loose connection construction. Each building has a front door made from aluminum and wood framing, with hasping padlocks set up on the doors. The floors are clay, and are packed with a home made tamper, which is made of wood 14" square, with a handle.

We have installed electricity, which is supplied by a generator. It provides lights and plugs for electrical appliances.

For litter, we use wood chips that are produced from our own planer, as well as the chips from the Government wood shops in Matthews Ridge, which are donated to us as no cost. The composted litter is used in the garden as fertilizer.

Each building has eight "tube-type" feeders. Four houses have roost-type perches, with drop tables 4' off the ground.

All our chicks are purchased in Georgetown, from poultry hatcheries at \$.65 per broiler. Their eggs are flown in from Florida, by Guyana Airways. The feed is purchased in Georgetown. We rent a truck to transport the feed from the store to the dock, where it is unloaded by us.

The feed for the broiler varies according to the age of the chicks. The first week, the feed averages 100 lbs. for 1000 broilers. We used 150 lbs. of feed the first week, 500 lbs. the second week, 800 lbs. the third week, 1250 lbs. the fourth week, 1400 lbs. the fifth week, and 1950 lbs. the sixth week. Chick starter is used for layers, and is given to them for seven weeks. They are gradually switched to growing rations, and then to egg rations at about 22 weeks.



PIGGERY

We received our first pigs in August, 1975, from the Ministry of Agriculture. They were: 1 Duroc boar, 12 weeks old; and 5 small pigs, 14 weeks. The pig family has grown to 130 pigs of all ages, and we can now raise our own breeding stock. We have, on our own, manufactured various feed mixtures using, in different combinations, cassava, coconut, rice, sweet potatoes, corn and cutlass beans, along with the hay

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of sweet potatoes. Equal parts of cutlass bean and bitter cassava have been selected as the primary feed, supplemented with bitter cassava tops and urea for additional protein. Putting the pigs to pasture on cleared land has helped their growth.

Our farrowing house, $100' \times 25'$, is pole-constructed, with aluminum roofing. We are putting in crabwood floors which allow for adequate disinfecting for virus control. The feed building is $60' \times 120'$, also pole-constructed, with a 20' drive-through so the dump truck can unload the feed.

Sawmill



The sawmill, in general, first codes what materials are needed from the construction sites and the prefab house and construction crews. From the picking up and unloading of the wood for our sawmill until the finished product is delivered to the construction or prefab house site, each piece must go through the process of the chain saw, the edger, the planer, and the radial arm saw.

One of our sources of wood is the Wiani saw mill. We also obtain wood from various pitsawyers who saw the trees into 2" and 3" thicknesses. We get crabwood, an open-grain hardwood (also called South American mahogany) and use it for furniture and building. Our choice in utilizing wood over the native *troulie* is based on cost. Troulie (palm thatching) is becoming hard to find without going deep into the bush and for the same cost wood can be used, wood being preferable in that it endures longer than the troulie, and is more bug-resistant. We do have several of the troulies built in the local style which are very attractive, but we are not using it much currently.

Our fishing trawler often picks up 15,000 board feet of wood from the Wiani and then the tractors and dumptrucks unload these boats. All this wood is collected and brought back to our sawmill.

At the sawmill, wood is cut into boards, and some is fashioned into trim-frames, shutters, etc. All finished materials are delivered to the construction site. Also between all this the sawmill does finish work using silver bally and cedar, and keeps all construction sites supplied with appropriate materials (trim, siding, framing) at all times.

All cabinets are made and designed in our cabinet and furniture department. There is no end to what teamwork has produced in their department-fabulous furniture, doors, stools, shelves, cabinets, baby cribs, benches, rebuilt and modernized kitchen cupboards, etc.

Our competent machinist keeps up the edger and planer, radial arm saw and numerous power tools. All this is carefully gone over by the coordinating supervisors of the sawmill who also collect the designs, drafts, plans and material orders to prepare the sawmill's schedule for the next day's or week's work. All scraps are burned for cooking purposes and the charcoal is used for fertilizer. The wood chips and sawdust are used as mulch on the farm.

PREFAB CONSTRUCTION DEPARTMENT

The lumber is edged, sorted, planed and cut to correct length and angle before it is carried to the prefab building site. Here it is stacked on the appropriate pallet, which specifies its dimensions and purpose.

The prefab center is ingenious. In the $13' \ge 22'$ building is a platform $10' \ge 20'$ raised 3' above the ground level, to avoid stooping to work. This platform at first glance appears to be a bewildering maze of differently colored blocks. Each block is secured to the platform by screws and each is precisely placed. The colored blocks are color-coded channels in which the studs, plates, and rafters can be put into exact position to be secured to the adjacent parts.

This system is so efficient that a 8' x 20' wall frame complete with windows and door can be completed in 15 minutes; A 12' x 8" wall frame complete with windows and door can be completed in 10 minutes, rafters can be completed in 5 minutes. An entire 12' x 20' house, rafters included, can be framed in 12 hours by a crew of 3!







Jonestown School

In Jonestown education is a way of life which affects all aspects of life. It is our intent to make education relevant to the growth and maturity of the child physically, morally, socially, intellectually, artistically, and finally with the goal of guiding the child in the acquisition of habits, attitudes and skills such as will enable the child to participate in collective thought, values and activities.

PRE-SCHOOL

Nursery school children receive guidance, supervision of activities, and instruction. Most activities are group activities. Children are encouraged to participate. Curriculum includes learning the use of table utensils, cleanliness and health habits, number concepts, naming quantities, alphabet recognition, and dance routines with educational themes. Learning tools include manipulative toys, puzzles, individual chalkboards, and motor and perceptual motor facilities in the play yard to be described later.

ELEMENTARY EDUCATION

At present the Jonestown School includes grades 1 through 7. Classes are not organized by grade or age, but rather by ability. The child can progress as rapidly as he/she desires and is advanced to a higher ability grouping when the teacher determines that the child is able to perform with the next ability grouping. For example, we now have an eight-year-old child working on a level equivalent to that of two thirteen-year-old students.

The groupings currently in use are: pre-reading, elementary reading skills and moderate competency, and those with moderate to well-developed reading skills. However, reading skills are not exclusive. A basic phonetic approach is started, accompanied by auditory training. The goal initially is to shift emphasis from phonetic analysis to sight reading as soon as phonetic analysis competency is achieved. Also, structural analysis, configuration and content skills are taught. At less advanced levels perceptual skills are stressed: visual, audio, tactile, motor and perceptual-motor skills which are fundamental to academic skills.

The school curriculum presently includes: language arts, receptive and expressive language which includes reading, writing, spelling and composition skills, mathematics, physical and earth science, social science (with emphasis on Guyanese history and culture), political science, and arts, crafts and music.

An emphasis is placed on development of educational games, activities, and materials utilizing materials indigenous to this area and parts of discarded objects. For example, many games, puzzles, and activities have been developed using local woods. Many individual chalkboards are used in place of paper and pencils. Chalkboards are usually made from steel plate with chalkboard paint covering. They are handy because pre-developed lessons can be secured to the chalkboard with the use of small magnets. Miniature chalkboards are also used for structural analysis, syllabication, prefix, root and suffix study and math fact drill cards, as everything can be wiped off and the boards re-used. Workbooks and paper lessons are done with the use of a plastic sheet cover and a wax lead marker. In this way the paper supplies and lessons can be re-used many times.

THE PLAY AREA

The children's playground at Jonestown is considered a vital educational tool as well as serving its traditional role as recreation. The playground includes many facilities designed to enhance basic body movement and balance skills as well as strength. The play items (which incidentally were designed by the Jonestown teacher and built by the children) include: a rolling barrel with an axle on pillow blocks, a great balance-developing device which rolls as the child "walks it"; a twenty foot stationary balance beam; a fifteen foot swinging balance beam; a bucking barrel designed to buck like a horse when the attached ropes are pulled from the sides; a twenty foot overhead ladder; double rings and trapeze bar; an acrobat bar (chinning bar) and two tether ball set-ups. Supplies also include basketballs, volleyballs, and nets, kickballs, soccer balls, baseball bats and accessories, badminton, and football. Central to the use of all equipment is the emphasis on cooperation rather than competitive values on the playground. Children are encouraged to help each other in performing various tasks on the playground.

THE WORK-STUDY CONCEPT

Students are involved in more than just "school" work in Jonestown. They are actively involved in the development and maintenance of Jonestown. Each child is required with help to care for his/her clothing, bedding, and living space and to participate in cleaning activities including domestic and yard and grounds care. Children even take some responsibility for maintenance of flower and plant beds and lawn care.

Also, on a merit basis, good workers are allowed to participate in the numerous work projects underway. Those who become conscientious, productive workers are frequently given the privilege of assisting with special projects. Indeed, the playground was one such project. Students helped collect, carry, debark the logs and poles and assisted with the construction.

(Note: This synopsis of the Jonestown School does not include a description of the vocational and technical training provided for young men and women beyond the seventh grade. In the fall, other academic training for older youth will begin.)



Medical Facility

In Jonestown we are in the process of developing an efficient medical clinic. We presently have a doctor and two licensed medical practitioners, one in neuro-surgical specialty and the other in pediatrics. We also have six registered nurses and a doctor of pharmacology with experience in teaching.

Preventive medical care is emphasized. Physical examinations are given each 6 months to everyone in Jonestown with special attention to bimonthly well-baby checkups, pre-natal care and follow-up for those with chronic diseases such as diabetes mellitus and epilepsy. A dietician supervises the kitchen aided by one of the registered nurses who prepares therapeutic diets and maintains a high nutritional standard in the meals served.

Therapeutic vitamins are provided for all of the local children who were malnourished before coming to Jonestown. Those with anemic disorders have been treated with supplemental iron preparation. Such treatment has been effective in treating many of the children of this area.

Our clinic is becoming well-stocked and we are prepared at all times to give first aid.

Communal Kitchen

One of the first buildings one sees when traveling up the road to Jonestown is the all-purpose kitchen where meals and treats are provided to workers and residents there.

THE KITCHEN

Three complète wood-paneled walls are designed to make the best use of space, working materials and comfort, including large shelved and divided cabinets and drawers above and below the glassy-varnished spacious counters. Commercial refrigeration and freezer units are used to store perishable items (when other means of feed preservation cannot be used). Food is stocked to the maximum with edibles from all the basic food groups including meats and proteins, starches and all varieties of succulent fruits and vegetables. Our kitchen has an ice-making unit, two cooking stoves (gas and kerosene) and a large, triple sectioned sink. Water comes from a hand-dug well that never runs dry all year long. It provides water for cooking, drinking, cleaning, laundry, and bathing for all Jonestown facilities.

The front wall of the kitchen is a full length serving counter having large removable partitions which can be raised or lowered at the servers' convenience to allow food to be served while reducing the entrance of insects to the kitchen itself. Such screening allows for the entrance of bright and healthy sunlight, while maintaining sanitation standards.

A large work table is secured in the middle of the floor under which airtight, water-resistant drums contain sugar, oil, various grains, and flour. Heavy duty pots of all sizes hang from the center ceiling. A large variety of kitchen utensils are stocked in the kitchen (including knives made in our metal workshop, providing all types of useful cutting edges).

A large, Guyanese-style wood oven is used for our massive bread-baking during the drier season. Cassava flour is one of the basic ingredients used in our bread.

Menus: Menus are planned in advance to allow for food supplying areas to be filled and for the medical staff to check for maximum nutritional health and vitamin standards to be maintained. Almost all foods are home-grown and home-prepared. The kitchen is an organized center of activity almost 24 hours a day as work teams prepare for the next day's meals, or bag lunches for workers further removed from the central dining area in their day's work. Working in shifts on a team basis has been found to be the most efficient method and also allows for ample rest for all participants and maximum use of all materials.

Meals: Meals are always promptly served. Breakfast is served in three shifts. First, the outdoor workers eat from 5:40 to 6:30 am, then the senior citizens eat from 7:00 to 7:30 and finally the children eat from 7:30 to 8:00 am. Naturally allowances are made for seniors or for any ill persons to have their meals served to them in their residences. Breakfast menus include such foods as eggs from Jonestown

chickens, cooked cereals, pancakes and homemade syrup and verying fruits seasonally available. Biscuits, rolls, and breads are baked daily by the cooking staff.

Many lunches are pre-made for workers and are distributed at breakfast time. The bulk of lunches utilize sandwiches made of cutlass bean patty, fish patty, peanut butter, egg salad, fried egg, eggplant, or pork meat products. Nuts, fruits, pastries or cookies are added as desserts. These are eaten at sheltered spots right on the work site. Seniors and children are served a hot meal in the communal dining room.

The kitchen also works closely with the nursing department to prepare calorie-rich, nourishing snacks and drinks in the mid-morning and mid-afternoon for children and underweight individuals. Those who are overweight are encouraged to take advantage of low-calorie meals, especially dished up by our medical staff.

Our cooking staff is comprised of an RN (who once managed an Italian restaurant), and a number of experienced individuals of all ages and the menu planning reflects their various cultural and ethnic backgrounds, as well as incorporating all local foods and products they have absorbed from the Amerindian adaptation of local products.

Kitchen cleanup crews work on a rotating schedule. Each person carries out his/her specific duties in a quiet, efficient manner. The dishes are cold-water rinsed, washed and stacked, then washed in a soapy detergent with bleach and boiling water, and put away. The cleaning process is carried on during and after kitchen activities. All surfaces are continually scrubbed and sanitized from ceiling to floor to provide the most healthful environment.



Afterword

The agricultural project has been financed entirely by members of Peoples Temple. Valuable in-kind services have been provided by the Guyana government on a number of occasions. We could never have progressed so far so fast were it not for the total cooperation given by the Guyanese at every step of the way.

We look forward to a relationship of friendship and mutual support between our mission settlers and Guyanese from every walk of life. We can only express our appreciation by trying to make our experiences useful for others engaged in similar efforts to expand and improve cultivation and development of the rich interior of Guyana, with the goal of benefiting her people.



Rev. Jim Jones, founder of the Peoples Temple Church and Prime Minister Forbes Burnham of Guyana.