

Client: Organization of Tropical Studies  
Project: El Cajon Project Video Treatment

## RESEARCH TO PROTECT THE TROPICS

### El Cajon: Energy For Honduras

The film opens with the men and women of a small village within the El Cajon watershed quietly going about their daily activities as their children play. A narrator states, in a soft voice, that within five years the homes and land we are viewing will be under many feet of water. The scene continues, and the narrator tells us that it is the best thing that could happen to these people.

*A montage of the rural Honduran landscape and rivers provide the background for the titles.*

Extreme close-ups, through a microscope, of a series of slides of microorganisms change quickly with emphasized sound effects. The camera then pulls back to reveal a scientist at work in a laboratory. Narration begins again, "These people have a common problem. While their populations are increasing, their natural resources are diminishing. Construction of the El Cajon dam and reservoir will provide the people of Honduras with clean, renewable, hydroelectric energy. And research has been the key ingredient in the planning of this project."

The body of the film considers each aspect of the environmental research, engineering, and resettlement planning involved in the construction of the dam, along with its impact on the land and current occupants. A combination of visuals, interviews, and narration effectively convey the scope of the programs developed to minimize any negative impacts and maximize the benefits of the project.

In limnological studies currently being conducted, the monitoring and analysis of Lago de Yojoa and Lago Yure is demonstrated and explained in terms of water quality and its impact on the future reservoir. As we explore the laboratory near the reservoir site, narration explains that the life of the reservoir is dependent upon the quality of the water. The success of fisheries, maintenance of the electrical generating parts, use as a recreational area, economic productivity, and the flow of the river downstream from the reservoir all require that good water quality be insured. This limnological lab will also provide a valuable training ground for Honduran students interested in the management and analysis of inland waters.

Carriers of disease producing viruses will need to be controlled. We see close-ups of the black fly, mosquito, and other vectors as a local doctor describes the diseases they carry and accompanying

symptoms. As we watch bulldozers at work, narration explains screening and inoculation programs, and how the removal and control of vegetation prior to the filling of the lake basin is an important method of preventing an increase in the carrier's populations.

Preventative programs will also take place at the dam site hospital, located, along with the construction camps, in an area outside the watershed. Wastewater treatment will discourage bacterial growth in the water of the reservoir and guard against resultant dysentery problems.

As we scan the construction camps, narration tells us that these camps will be inhabited by groups of engineers and scientists from around the world. We see drawings and scale models of the dam and reservoir, and engineers describe the more outstanding elements of their design.

Clips of groups of visitors to the camps include biologists conducting surveys of resident species within the few remaining virgin stands of timber and natural forest habitat. Studies of the plants and wildlife will contribute greatly to the current body of knowledge of environmental utilization and preservation in Honduras.

We see shots of Tegucigalpa and San Pedro Sula, the major industrial centers of Honduras. A common problem in the villages is the exodus of young men to these already crowded cities to find work and improve the quality of their lives. Interviews with the men in the cities elaborate on this situation as they discuss theories that temporary work at the dam site, more roads easing the transport of goods, and the job of building new homes and schools will encourage them to stay home.

When we return to the village the older men are discussing the relocation at a local meeting place. These gathering places are scarce, usually schools, churches, and stores since the people live in isolated family units with little or no community structure. Yet they have expressed a willingness to work as a community for purposes of relocation. Working together and actively planning their resettlement will lead toward a more supportive and technologically advanced community. A program representative describes facets of the resettlement program as he meets with the leaders of each village; together they plan a course of action. Later the village committees will take over.

These are independent, self-sufficient people who take pride in controlling their own lives. A national holiday, September 15, celebrates their independence from Spain. Their basic social structure is robust and adaptable. We see them participating in various seasonal observances. Yet protein and vitamin deficiencies are becoming common. Lack of meat and vegetables contribute to obvious signs of malnutrition and disease, lack of fruit to scurvy. The resettlement program hopes that along with relocation planning, they will work together to find better ways of providing for their families.

The typical village home is overcrowded with only one or two rooms and a cooking alcove. There is no running water and only a dirt floor. With an average of eight to ten people in one house, monetary value of property in proportion to dependents is low. The people have expressed a desire to be compensated with land rather than money. With the large number of people to be displaced, 1,500 to 3,000, there is a considerable amount of work ahead since there is no accurate record as to who owns the land.

Within the watershed and the reservoir site exist sites of ancient Mayan cities; a people known for their advanced science and learning. This ancient civilization of stone palaces, pyramids, and temples dates back to the year 800, when the cities were mysteriously abandoned. Comprehensive research and excavations are being conducted at the reservoir site in search of previously undiscovered relics. These relics are invaluable, and recovery and preservation of their country's archaeological heritage is timely, as pilfering and grave robbing has become a serious threat.

The screen lights up with flames from fires started to clear the forests to create pasture and farm land. This ancient and destructive method of slash and burn agriculture is still being used in excess today. Narration explains how this technique is considered by many to be directly responsible for the decline of health and growing inability of the people to produce at even a subsistence level. This method is so destructive that the very future of the country is threatened by the disastrous loss of irreplaceable topsoil as a result of these primitive agricultural and forestry practices. We hear that the forests are disappearing and see a montage of shots of wood being used as fuel. A major part of the resettlement program will be dedicated to teaching new methods of agriculture, and setting up a land management program to encourage reform in land use patterns. Environmental conservation practices in the watershed area will protect the reservoir from the effects of erosion and provide a much-needed natural forest, floral, and faunal reserve.

The film concludes with scenes of the people continuing to go about their daily activities. Narration asserts that it is obvious that the El Cajon project will provide more than the direct benefits of hydroelectric power. Aerial views of the watershed area are accompanied by narration "Construction of the El Cajon dam will serve as a national and worldwide model of extensive environmental and resettlement planning within the framework of a massive hydropower project; planning and research that is so necessary today in order to fulfill a commitment of responsibility to the people and fragile ecosystems involved."