

PD-ABQ-382

Environmental Policy and Technology Project

Contract No CCN-0003-Q-00-3165

TRIP REPORT

Evaluation of Raion for Pilot Planning Process

4 April - 8 April 1995

Chuguevskii Raion

D Miquelle - April 1995
Delivery Order 11, Task 9

Prepared for
U.S. Agency for International Development
Office of Environment and Health, Moscow

Prepared by
Russian Far East Office, Khabarovsk, Russia
Environmental Policy and Technology Project
A USAID Project Consortium Led by CH2M HILL



**Environmental Policy and Technology Project
Regional Field Office / Moscow**

(Managed by CH2M HILL)

This report was done as part of Task 9 of Delivery Order 11

This report has been reviewed for content and approved for distribution



EPT Regional Director

15 Sept. 1997
Date

- 1 -

CHUGUEVSKI TRIP REPORT APRIL 4-8, 1995

EVALUATION OF RAION FOR PILOT PLANNING PROCESS

Prepared by Dr Dale Miquelle RFE EPT Project

INTRODUCTION AND OBJECTIVES

On April 4th, 4 EPT representatives left Vladivostok for Chuguevski Raion to assess the Raion as a potential site for a land-use planning process as delineated in Task 9 of the EPT RFE Sustainable Natural Resource Management Project Workplan. The team was comprised of Vasily Karpenko, Vladimir Karakin, Dale Miquelle, and David Gordon, a PERC representative acting as consultant for the EPT Project. Our primary contact was Anatoly Ivanovich Prekhodka, Head of Primorye Regional Forest Service (Upravlenie Lesami) who provided initial introductions to the region, and who initially suggested Chuguevski Raion to implement a model integrated resource planning and management project.

A successful planning process that leads to sustainable forestry must be 1) ecologically sound, 2) economically viable, and 3) socially responsible. We hope to initiate a planning process that incorporates this triage in the following way. The initial plan called for a multidisciplinary team of specialists and local community members to develop landscape-level and stand-level forest management plans for the area, paying particular attention to protection of a wildlife corridor between Sikhote-Alinski and Lazovski Nature Preserves. The development of landscape-level and stand-level forest management plans for such a pilot project site will train Russian participants in the principles and application of landscape planning and ecosystem management. Application of these plans will ensure ecosystem protection in the south central Sikhote-Alin region, while allowing for ecologically responsible forest management. The planning process should also provide responsible support to the economy of local villages, which are largely dependent on the logging industry. The pilot project may be linked to fire prevention and forest regeneration activities being carried out by the US Forest Service. To be economically viable and socially responsible, the project will include small enterprise development through the small Enterprise Fund, which will support small industries related to sustainable forestry and non-timber forest products industries in the region. By promoting such development, the economy of the region can hopefully be bolstered and diversified, thereby increasing the standard of living in the villages.

BASELINE DATA ON CHUGUEVSKI RAION

At 12 million ha, Chuguevski is one of the largest raions in Primorski Krai. Because of its central location, it acts as a potentially critically ecological link between northern and southern Primorye. Due to its central location and the fact that the highest peaks in Primorye are found there, many of the forest types found throughout Primorye are represented in Chuguevski. The Raion is on the inland side of the Sikhote-Alin Divide, and therefore its climate is continental, with cold winters (a minimum of -58° in January) and hot summers (a maximum of 45°). Snowfall is moderate, and most precipitation occurs in summer (85-200 mm/year).

The Raion administration and LesHoz administrative center is located in the town of Chuguevka, in the southern third of the Raion. The Raion is populated with approximately 32,000 people, of which about 10,000 live in the town of Chuguevka.

TRAVEL ITINERARY

Prekhodka accompanied the EPT team from Vladivostok to Chuguevski, and participated in discussions about forest management, fire prevention, and forest economics during the trip. In Chuguevka he introduced us to the Raion Administrative Head Vladimir Nikolaevich Kavalenko, as well as the Director of the LesKhos, Anatoly Aleksandrovich Baskakov, who would be our host for the rest of our stay. We arrived late in the day on April 4th, and therefore had a brief meeting and then dinner with Kavalenko, Baskakov, and Director of GosPromPreroda, Anatoly Alexandrovich Barovski. On April 5th we had an hour-long meeting with Barovski in the morning to discuss the planning process as we envisioned it, and then spent the rest of the day with Baskakov, who provided us with a tour of the southern-most of the three LesHos Forest Districts in the Raion.

On Thursday, April 6th, we traveled north to the central forest district, Shumnie, and visited with LesHos officials, as well as with one private entrepreneur. This visit was relatively short, but we were all impressed with the District Forest Supervisor, as well as his assistant, who were both frank in their discussions and interested in our proposals.

Friday, April 7th was spent in the town of Chuguevka, where we met again with Baskakov, GosPromHos Director Gregory Nageyovich Zookvenko, and visited the joint venture Japanese-Russian lumber mill. On Saturday, April 8th, we had hoped for a meeting with Garponov, who presides over the EPT PCC in Vladivostok, to join us in meetings with Raion officials. Apparently due to bad weather, he did not arrive. Therefore, we had a relatively brief meeting with Raion Head Kavalenko again, before returning to Vladivostok.

HISTORY OF FORESTRY IN CHUGUEVSKI RAION

Immediately after World War II, logging activities were greatly increased in Chuguevski Raion. Up until the mid-1980's, Korean pine was the main commercial timber species, and concentration on that species in the mixed forests of Primorve led to the development of a selective logging regime that removed only the most valuable timber. A ban on logging of Korean pine was enacted in 1990, when it was realized that very little of the pine remained. Removal of the Korean pine, probably had more impact on ecosystem structure, functions, and processes than any of the more recent logging activities. Firstly, it removed a critical component of the ecosystem, Korean pine, that provides forage for a host of animal species (e.g., bears, chipmunks, squirrels, wild boar), some of which in turn provide a prey base for a host of predators (sable, marten, raptors, tigers). Secondly, a road system was created throughout much of the region to provide access to the pine. This road system can potentially disrupt ecosystem functions by directly eliminating natural habitat, restricting movements of small animals, creating edge effects, and exacerbating blowdowns, contributing to stream sedimentation, and providing easy access for legal and illegal hunting and harvest of other forest products.

PRESENT FORESTRY INDUSTRY IN CHUGUEVSKI RAION

Since the ban on logging of Korean pine (which is still legally and illegally taken along skid tracks and on roads), the forest industry has concentrated primarily on softwoods, including fir, spruce, and larch. Some hardwoods, including oak and ash, are now being more intensively harvested, and yellow birch is also receiving some attention. Due to the fact that the forests are mixed, the harvest method remains a selective process, with skidders working on tracks constructed by bulldozers not closer than 20 meters apart.

The LesKhos, the branch of the Forest Service charged with regulating harvest, is represented by three forest districts in Chuguevskı Raion: Kasharaskı in the north, Shumneskova in the center, and Chuguevskı in the south. LesPromHos, which used to be a branch of the State Forest Service charged with harvest, has become privatized and there are now 3 major LesPromHos in the Raion. There are, however, a total of approximately 26 organizations involved in logging operations of the region. Presently the Raion administration is considering ways to reduce the number of logging outfits, partly because some are not paying taxes to the Raion, and partly because of the problems of trying to regulate that many operations. Kavalenko suggested he would like to see about 8 organizations engaged in logging operations in the 3 Forest Districts combined.

During our fieldtrips in the region we were impressed with the quality of the management process as it now exists, and the level of protection presently afforded to the forests. We did not visit the northernmost District, Kasharaskı, and so do not know the status of logging sites there. However, in general we found that while the process is by no means flawless, the Raion has done a good job of maintaining its forest cover, although forest composition has changed considerably (see above). Present regulations, which are fairly strict, are geared towards watershed protection, soil protection, and natural regeneration. For instance, riverine forests are protected from cutting within a distance of 50 to 500 meters from stream edge, depending on the size of the stream. Slopes steeper than 30 degrees are not cut to avoid soil erosion, and ridgetops are not logged within 50 to 500 meters, to allow for natural regeneration to occur from the top of the ridges (perhaps a suspect process on large slopes).

The timber industry is by far the most important component of the Raion economy. In 1990, 2 million cubic meters of timber were being cut per year. Due to the dramatic changes in the economy, output has fallen to approximately 65,000 cubic meters for 1994. Unemployment is officially registered at 9% but officials suggested that the real unemployment rate is much higher. Presently there are approximately 2,000 people employed by the LesPromHos. Many of the officials we spoke with suggested that the economic condition of the Raion would be disastrous without the money brought due to export of timber, which accounts for an estimated 80% of the logs cut presently. Tax structures, which in total cost approximately 13% to the logging concession, provide revenue for both Raion and Krai administrations, as well as for the local LesHos, which regulates logging activities. One potential flaw in this system is that LesHos earns revenue based partly on stumpage fees, which means there is an incentive for LesHos to maintain high cut rates to maintain the income of revenue.

Regeneration

We also toured through a oak forest where they had recently planted Korean pine seedlings in an attempt to expedite the reestablishment of this species. Baskakov told us that about 300 ha/year are presently being planted in pine, with seedlings coming from a nursery in Chuguevskı. Seedlings appeared to be doing fairly well, but in adjacent oak stands natural regeneration appeared more robust. It was not clear why natural regeneration was not occurring on the site where seedlings were planted.

Joint Venture Lumber Mill

In Chuguevskı a joint venture lumber mill with the Japanese began producing lumber last year. The venture is represented on the Russian side by Chuguevka LesPromHos, PrimorLesHos, and ACFES (which holds only about 10%). The mill creates several sizes of lumber, appeared to be running very smoothly and the equipment was in good working order. The manager of the mill told us that they are having trouble selling on the local market and are having difficulty exporting. However, the plant was active when we were there and storage yards did not appear overstocked, suggesting that they are finding some market for their product.

WILDLIFE AND NON-TIMBER FOREST PRODUCTS

Wildlife populations appeared to have been reduced to a disastrous condition. In our travels tracks of game were very scarce in the forests. There appears to be virtually no enforcement, poaching being considered acceptable behavior during these hard times, and being conducted by people at all levels. As a result the game populations have been decimated. In our discussions with Koopzverpromhos, the director was reluctant to admit that poaching was a problem. He claimed that elk populations were averaging 3/1000 ha (which is likely a high estimate, and even so, very low) and stated that their taiga was "very rich". However, Raion administration officials (Kavalenko) admitted that some serious steps had to be taken.

Destruction of the ungulate populations has several profound ramifications: 1) because population levels are severely depressed, productivity is depressed and sustainable yield of game populations is much lower than it should be. This means that there is much less wild game meat that could be harvested by people than if the population were allowed to recover. 2) The depression in ungulate populations also severely impacts the Amur tiger population, which is almost totally dependent on wild boar and elk. The director of Koopzverpromhos believed there to be 50-60 tigers in the Raion (likely an exaggeration) and said that poaching is not a problem, estimating that 3-4 are killed a year (and during the peak of poaching the last 2 years, may have reached 6-7 per year). With greatly depressed prey populations the tiger has to be stressed. Reproduction may be low, and tigers likely must travel further to find sufficient game, rendering them more likely to come in contact with people, either through chance meetings in the forest, or due to more encounters near villages. The people of Shumnie had several stories of close encounters with tigers near the village in the past several years and just last week a tigress had apparently been killed in the Kasharaski District, and the cub had been "treed" close to a village. 3) The decrease in ungulate populations, due mostly to intensive and illegal hunting, leads some hunters to blame the tiger for killing off all the game. The conflict between hunter needs and those of large predators always become more exacerbated when game species are rare. This leads many people to recommend reducing the predator population to increase game population, even when the predator population is usually not responsible for the demise of the ungulates.

Kavalenko told us he has taken several steps to try to turn the situation around. He, in association with Barovskii of Gos Prom Preroda and LesHos, has created an operational team that includes a policeman, game warden, and Forest inspector, whose task is to capture poachers, stop illegal fishing, and stem illegal logging activities. Confiscated logs are being sold to the export market, and the generated revenue is being used for community development projects. He is also preparing to institute a 2-year moratorium on hunting of ungulate species which would be a critical step towards letting the game populations respond. Even though legal harvest is probably the most serious problem it provides a "smokescreen" that allows poachers to operate.

Koopzverpromhos employs 70 people in Chuguevka much less than formerly, and many are part-time. They allocate approximately 35% of their efforts towards coordinating hunting and trapping activities, and 65% to non-timber forest products. There are approximately 1000 hunters in Chuguevskii each of whom are allocated parcels of land upon which to hunt, trap, and patrol. Soon, a new system will be initiated that will require hunters to pay for proprietary rights of hunting parcels. It is unknown how expensive such parcels will be or over what time frame they will be allocated, but it is likely they will be given for long periods of time (perhaps 5 - 15 years). Licenses for big game must be purchased through Koopzverpromhos but the money does not return to the organization. Formerly Koopzverpromhos handled 10-12 tons of meat/year, but that amount has dropped to 2 tons/year as hunters spend fewer time in the forest (because returns for their efforts are lower) and game populations are lower.

The only zakaznik in Chuguevskii, Beryozovka is 60 000 ha in size and was set aside to protect sable and elk. However, the zakaznik is close to a village, and with only one guard assigned to patrol it without vehicle or other technical support the zakaznik exists virtually on paper only. Additionally, logging can occur on these lands, so habitat cannot be managed for wildlife.

Representatives of Koopzverpromhos, traditionally responsible for coordinating collection of non-timber forest products, expressed great interest in finding markets for such products. They are capable of collecting a variety of products, including rosehips, birch juice, ferns (paparanik), mushrooms, honey, and Siberian ginseng. For instance, 3 1/2 tons of ferns were collected last year, and this is only a fraction of what was formerly produced. Siberian ginseng has been intensively harvested, both wild and domestic strains, but now they have a huge backlog, with no market.

Some of the most animated discussions were about honey. Koopzverpromhos can produce 60-80 tons of honey a year, but there is presently no outlet due to a glut in the honey market. Honey presently costs more than sugar, therefore driving the demand for honey very low. Many people maintain bees in the area, and can provide a huge volume, but there is no local market, and no access to an international one. In Shumnie we met a small business merchant, Anatoly Fyodorovich Lukyantsev, who had already established a market by selling honey to a Yugoslavian, and claimed that his small cans (approximately 250 g) of honey with Lemonik juice added were once sold in eastern Europe for \$22. However, his contact disappeared, and now his machinery stands idle.

This small businessman demonstrated some of the problems in trying to initiate small enterprises in the region. When we asked how much his honey cost to produce, he told us he would give them to us for free. When we explained we wanted to know how much it cost to produce the honey so we could assess its feasibility on the international market, he had no idea how to respond and had never thought to estimate the cost of production as a means of pricing his product.

RECOMMENDATIONS

Some general considerations include

1) While there are some problems with the existing system of managing the forest industry, the general procedures of stand-level planning are basically sound. However, planning is somewhat reactive. LesPromHos tells LesHos what they want to cut, and LesHos either disagrees or agrees, in which case they delineate the boundaries, determine sensitive areas, and determine constraints and regulations associated with each cut. There seem to be two problems with this general approach. Firstly, while the stand-level planning is adequate, there is little planning at the larger scale. Yearly cuts are based on inventory estimates of LesProekt, and are supposed to be sustainable, but there is not a large-scale plan to delineate where various activities can occur. Secondly, what seems to be lacking in all planning levels is a process that incorporates the needs of other users of the forest resources - i.e., there is no multiple-use plan that protects wildlife habitat, fisheries, sites important for non-timber products, and integrity of ecosystem functions. In particular, wildlife populations appear to be severely depressed presently. Incorporation of non-timber products in the stand-level planning and large-scale planning would help provide for a more diversified and stable economy.

The present process, in which LesHos does all planning on forested lands, is a well-entrenched system. When we talked to Koopzverpromhos people about participating in a planning process, they simply responded that LesHos does all forest planning. We suggested that it might be wise to incorporate wildlife habitat into the planning process, and they agreed, but still did not understand well how they would participate in the process. Such a planning process will likely only be successful if we can first of all convey the concept and need for such a process, and then provide incentives to participate in the process.

2) The stand-level planning process is essentially well-done, but the local LesHos relies on inventory data from LesProekt to determine annual allowable cut, and then lets the LesPromHos

select areas up to the quota. If LesHos participated in the planning process more fully, they might obtain a better perspective on large-scale management issues.

3) The planning process that includes wildlife habitat can help wildlife populations in several ways. Firstly, identification of remaining Korean pine stands, mapping them, protecting them, and considering ways to "link" small patches to create more substantial pine forests, would greatly increase the quality of the forests for wildlife. It would also acknowledge the value of mature, "old growth" forests as an important component of the forest complex. LesHos may be willing to set aside some of these patches of pine as wildlife habitat, especially if regeneration of pine for production can occur in other areas.

Secondly, there is a very great need to support the enforcement of game laws, and eliminate or at least greatly reduce poaching, which at present is considered a socially acceptable enterprise by many. Kavalenko, Head of the Raion, has demonstrated a commitment to crack down on all types of illegal use of forest resources, and to create a 2-year ban on big game hunting. Therefore, we should seek funding to support his operational group. I will make such suggestions to WWF-Germany representatives who are actively supporting other such groups in the Russian Far East presently. If WWF-Germany is not capable of supporting the group, EPT should consider subsidizing it.

Thirdly, the EPT Project may seek outside funding to support individual hunters to rent lands that will be exclusively theirs to oversee. Under the former Russian system, each hunter was allocated a parcel of land which was his own responsibility to oversee, to patrol against poachers, and to harvest animals (mostly ungulates and furbearers). Koopzverpromhos set limits on harvests for each hunting parcel. This system is still more or less maintained in Chuguevski, but because hunters cannot make a living solely from their harvest, they spend less time in the forest than formerly. This provides opportunities for poachers to range more widely and freely. Shortly, a new system will be instituted, whereby hunters will be required to pay a substantial amount to rent hunting parcels (which were formerly provided without pay). These rental agreements are likely to be long-term (15 years was mentioned as the likely time-frame), and therefore may be expensive. If a adequate number of hunters were subsidized under the umbrella of the EPT project, a number of conditions could be attached to the subsidy, including: 1) a agreement to regularly patrol the parcel to prevent poachers from using the land, 2) agreement to harvest ungulates at a sustainable level, 3) an agreement to protect tigers, and to provide annual reports on tigers in the hunting parcel (which is used in present tiger census techniques).

4) Many people we talked to keyed into the small business end of our approach, and took relatively little interest in the planning process. Considering the stress and economic hardship, this is understandable and predictable. But we must impress that we are interested in the long-term viability of the resources and maintenance of the quality lifestyle of the villages. A trip to the U.S. by a planning team to review such programs there may go a long way towards seeing the value of this approach.

5) The planning process will be a key to aiding small businesses get started in the region. We identified several enterprising individuals who need support and training to get their businesses underway. The small business loans would provide a mechanism by which they can get started.

6) For this task to be successful, we need a professional land-use planner who has extensive experience in developing multiple-use plans in forest habitats. This person does not necessarily have to be a forest planner per se, but obviously should have extensive experience in the forestry arena, and also be capable of addressing wildlife habitat requirements.

THE NEXT STEPS

Representatives of all contacted organizations as well Raion officials expressed an interest in pursuing the planning process even if they had a relatively poor understanding of it. Therefore, we promised to return in a relatively short time to initiate work. The following steps need to be taken

1 Meet with Prekhodka the week of April 10 for a debriefing. We will also request from him forest type maps, inventory information, and, if it exists, stands of virgin, old-growth forests, as well as all Korean pine forests.

2 Develop a base map and make copies that can be provided to appropriate individuals to start gathering the necessary information. (Karakin's office can produce such a map)

3 Collect and map the following information

- a forest types
- b inventory data
- c old growth forests
- d pine forests
- e road system
- f village locations and population densities
- g valuable non-timber forest production sites (available from Koopzverpromhos)
- h forest district boundaries and stand boundaries
- i critical wildlife habitat
- j soil types
- k slopes (at least categories of slopes to define areas where cutting will not be allowed)

4 Assess the feasibility of digitizing the mapped information so that we have a database that can be updated and utilized in future planning processes for the region. If digitizing is too expensive in Russia, then it can be done in the U.S. If this avenue is selected, someone in the Raion should be trained in use of the database (for instance, use of ArcView)

5 Create a local planning team tentatively including

- a Baskakov, Head of LesHos
- b Shumnie District Ranger (and subranger?)
- c Kavalenko, Head Administrator of Raion, or an assistant
- d Zookvenko, Koopzverpromhos (or preferably specialist below him)
- f Barovksi, GosProm Preroda

6 Assemble as many people from the Vladivostok assemblage of specialists as necessary, including a land-use planner, but maintain a small core of people who can work well together.

7 Invite a U.S. land-use planning to the region (not necessarily a forest planner) who can incorporate the multiple needs of the region, with the obvious priority on forestry.

8 Start the planning process by mid-summer, with the entire team spending at least 10 days together in Chuguevka.

9 Bring the local planning team to the northwest U.S. in early fall to review community level planning processes, and multiple-use planning programs that work (Gordon has already done tours such as these and provide much valuable information).

10 Continue the planning process immediately after their return, while their interest, and hopefully excitement, are at a peak

11 Publish the results of the planning process

12 Implement the program