Towards Forest Sustainability

Logging in Samoa

Logging in Samoa has been described as an operation that involves removal of all currently merchantable timber, leaving a relic (remnant) stand consisting of un-saleable timber species, defectives and small trees. Such stand do not tend to regenerate adequately for further cutting within an acceptable period of time and are usually converted to agricultural land by customary landowners. Open areas and caps created by loggers are usually invaded by unwanted weeds often called invasives. The logging practises in Samoa are not sensitive to the forest ecology, thus the chances of natural regeneration are generally reduced or impeded. The majority of loggers do not maintain the required 60 metres buffers along rivers; often long slope that are greater than 30 degrees damage river and creek banks and block and pollute rivers and creeks with debris. Felling direction of trees is not taken into consideration in the pre-harvesting activities of loggers; thus felling causes extensive damage to the residual stocks. Extensive damage is also caused by the wide snig tracks which logs are dragged out.

The Loss of Tropical Forests (World Perspective) by: Saburo Yamamura, Paul H. Allum & Juri ABE Seibido 1994.

Forests are sometimes called the lungs of the earth or green reservoirs. Unfortunately, forests all over the world are becoming rapidly depleted because of reckless felling. The findings of the latest research by the United Nations Food and Agriculture Organisation (FAO) have revealed that 20,000,000 hectares of tropical forest, about half the area of Japan, disappear from our planet every year. The speed of their disappearance is 50% faster than it was ten to fifteen years ago. Until eight years ago, the tropical forest in the Amazon basin was being destroyed at the rate of approximately 1% a year. Tropical forests in developing countries are being lost at the rate of about 40% hectares per minute. The secretary general of FAO insists that because the depletion of tropical forests is now very serious, every country in the world including Samoa should take immediate steps to save them from destruction. According to a survey conducted by FAO, 40% of the tropical rainforest destroyed between 1981 and 1991 was either in the Andes or the Amazon basin, and 30% was accounted for by Southeast Asian countries such as

Indonesia, Malaysia, Thailand and the Philippines. The forests growing in the savannah of Africa were extensively depleted in the 1980s as well as in the 1970s. As a result, the area of tropical forest left on the earth is approximately three billion hectares. At the time when man first appeared on earth, 40% of the planet's land surface was covered with tropical forests, but now the figure is about 6%. Virgin forests, too, are being destroyed on a large scale. Mangrove forests supply important habitats for numerous species of fish, invertebrates and plants. Unfortunately, however, mangrove forests worldwide are also being destroyed at a rapid rate. For example, India's mangrove area which was twice the size of Hokkaido has been completely lost since the beginning of the 20th century. The reason is that the mangrove forests have been cut down recklessly for fuel wood, building materials and wood chips.

A major environment concern

Forest depletion is a major environmental issue on a global scale. Causes of deforestation has been discussed to be originated from various ways. First, because of the rapidly increasing population in impoverished areas, people must carry out slash and burn farming to get more croplands. Second, they fell a lot of trees for commercial purposes or for fuel. Third they have to create new grazing lands for their cattle. Fourth, population grows very fast and land is needed for them to settle, so as population grows rapidly, more and more land is used for settlements.

One of the distinctive features of tropical rainforests is that many different species of animals inhabit them**.** Tropical rainforests are a vital home for many unusual creatures. The destruction of tropical forests deprives plant and animal species of their natural habitats. The preservation of forests is also of crucial importance, because trees have the function of taking CO2 out of the atmosphere to produce oxygen. On top of that, trees absorb water and conserve soil. Thus, the loss of many trees and tropical forests has an adverse effect on global ecosystems and climates.

Cut one Plant one

We all need to cut down trees to supply timber, firewood/fuel, provide areas for farming and settlements. However, we can stop the problems occurred by working together in trying to monitor our activities because what we do will always come back to us. **If we cut down one tree make sure to plant a new tree to replace it so that the responsibilities carried by the lost tree can continue.**

Samoa is importing large volumes of timber from other countries like Fiji, Australia and New Zealand with tropical forests. Thus, we should take some responsibility for helping these countries to conserve their tropical forests. Therefore, people all over the world should make serious efforts to prevent a further decrease in forests.

Faatumauina o tulaga lelei o Vaomatua

Vaaiga i leTaina o Vaomatua i Samoa

O le taina o vaomatua I totonu o Samoa ua faamatalaina o se atinae e aofia ai le toesea na o laau agavaa lava mo laupapa ma tupe maua, ae tuua ai tau o toega o vaomatua e tumu I laau le manaomia mo ia atinae, laau ua mamai ma laau laiti. E matua leai se faamoemoe mo nei laau I se taimi talafeagai e toe maua mai ai nisi laupapa, aua foi o le a avea lea ma avanoa e oo atu ai o tatou tagata ma faaaogaina nei eleele mo atinae tau faatoaga. O le tele o avanoa I vaega o vaomatua ua taina ua matua tumu lava I vao

eseese, ma o nisi o ia laau ua taua o laau faalafua. O auala o loo faatinoina ai le taina o vaomatua I Samoa e le o mafai ona atagia mai ai le faapaleniina o le olaga faanatura poo le siosiomaga lautele ma o le a avea lena ma auala e matua faaititia ai le toe totogo a'e o vaomatua. O le tele lava o le au fai ili laupapa e le o amanaiaina le 60 mita faatulagaina mai autafa o vaitafe e gata ai le ta, e oo foi I mapuepue e silia ma le 30 tikeli ua faalalo uma ma o le faafitauli ogaoga lea fesootai i le faaleagaina o le tele o alia ma vaitafe. E le o atagia mai foi ia latou galuega faatino le ave o le faamamafa i le itulagi tonu e faalalo agai i ai laau, ma o se faaopopoga foi lena i le faatamaiaina o laau iti ma laau totoe. E oo foi I le soona suatia o auala e toso mai ai laau I soo se vaega o le vaomatua o le faatupulaia foi na o nisi o faafitauli pei o le faatamaiaina o laau iti, tafia o le palapala ma le faaleagaina o vaitafe ma alia.

Faatamaia o Vaomatua i le Lalolagi

O nisi o faalupega ma le faaeaea e ave I vaomatua ua faatusaina o se faamama mo le lalolagi poo se faatanoa lanu meamata. E ui lava I lea gagana manaia ua faatusaina I ai vaomatua peitai ane o loo maitauina pea le televave ona faaititia o vaomatua I le lalolagi ona o le soona taina le fuafuatatau. I faamaumauga mai se sailiiliga na faia e le faalapotopotoga o taumafa a le lalolagi le FAO, na faailoa mai ai e tusa ma le 20,000,000 ekitea (hectare) o vaomatua mai vaega mafanafana e tusa lea o le faaluaina le tele o Iapani le aofaiga o vaomatua faalaloina mai lo tatou paneta I le tausaga e tasi. O se suiga televave lea pe tusa ma le 50% ua faaopopo ai mai le 10 I le 15 tausaga talu ai. I le isi valu tausaga ua tuanai, na lipotia mai ai le faatamaiaina o le vaomatua I le Amazon basin I le pe tusa ma le 1% I le tausaga. E oo foi I vaomatua I atunuu e vaivai o latou tamaoaiga na faamauina le tele o le faaaogaina I le saoasao e tusa ma le 40% ekitea I le minute. I se saunoaga mai le failautusi aoao o le FAO na ia taua ai le tulaga talafeagai I atunuu uma e aofia ai ma Samoa ona matua silasila totoa ini auala e laveaina mai ai o tatou vaomatua mai le soona faatamaiaina. I nisi o faamaumauga a le FAO, na taua ai e tusa ma le 40% o le aofaiga o vaomatua I vaega mafanafana na faatamaiaina I le va o le 1991 ma 1991 mai Andes poo Amazon basin, ae 30% le aofaiga faaititia mai atunuu I Saute Sasae e I ai Indonesia, Malaysia, Thailand, ma Filipaina. O vaomatua I totonu o Aferika na matua faatamaiaina I le va

o le 1970 ma le 1980. E tusa ma le 3 piliona se ata faataitai o vaomatua I vaega mafanafana (tropical forests) o loo totoe nei I le lalolagi. I le vaitau na uluai nofoia ai le lueleele e tagata, e tusa ma le 40% o le laueleele na aofia I vaomatua, peitai I le taimi nei ua maitauina le pau maulalo I se aofaiga e na o le 6% o loo totoe mai vaomatua o vaega mafanafana o le lalolagi. E oo foi I vaomatua o loo totoe nei o loo vaaia lava le televave tele o lo latou faatamiaina. O togatogo nisi o vaomatua ua fai ma ofaga o le tele o meaola, peitai o se faanoanoaga tele le tulaga faateleina o le taina I lalo o ia nofoaga taua. I le taulotoaiga o le seneturi e 20, na faailoa mai ai le faatamaiaina uma o togatogo I totonu o Initia e faatusaina lona tele I le faaluaina o le eleele o Hokkaido I Iapani. O le mafuaaga autu lava o le tele o le faatamaiaina o togatogo nei I Initia e tutusa ai foi ma isi atunuu e aofia ai le taina I lalo mo fafie, fausia ai o fale ma isi.

Ta le laau, Toto le laau

Tatou te moomia le taina o laau mo laupapa, fafie, ma le faatoaina o fanua mo faatoaga. **Peitai, a tatou ta le laau e ao lava ona toe toto se laau fou e sui ai ina ia faatumauina e le laau fou galuega aoga a le laau ua tu'uina**. E le gata i lea ona o lo'o faatau mai e lo tatou atunuu laupapa o vaomatua anamua mai isi atunuu e pei o Fiti, Ausetalia ma Niu Sila, e tatau foi ona tatou faaaoga tatau laupapa ina ia fesoasoani i le faasaoina o vaomatua anamua i ia foi atunuu o le lalolagi.

Childrens Corner

A. Answer True or False to the following questions.

1. Worldwide, tropical forests are being lost at the rate of 1% a year.
   True or False

2. The problem of forest depletion is now so serious that we must act immediately
   True or False

3. Mangrove forests are cut down mainly for agricultural purposes.
   True or False

4. The destruction of tropical forests will lead to the extinction of many species.
   True or False

5. Forests are called the lungs of the earth because they breathe in oxygen.
   True or False

6. A 100 metres buffer zone is required along rivers of Samoa.
   True or False

7. The government of Samoa is now facing the challenge of trying and balance current development and infrastructure.
   True or False

8. Extensive damage to forest ecosystems also caused by wider snig tracks use for dragging logs.
   True or False

B. Fill the blank spaces with the correct word.

Tropical forests all ( ) the world are becoming rapidly ( ). The main ( ) of this are the ( ) of trees for building materials and fuel wood, and ( ) and burn farming.

{causes, depleted, felling, over, slash}

C. Rearrange the phase in brackets to fill the space provided.

Tropical rainforests, which _____

_____, are now in a critical condition.

{are ecosystems essential for global maintenance of the}