

Rural Women and Climate Change: Challenges and Recommendations

Asia Pacific Conference on Climate Change
Asia Pacific Research Network (APRN)
23-24 March 2009, Bangkok, Thailand

by Vernie Yocogan-Diano

chairperson, Innabuyog, alliance of indigenous women's organizations in the Cordillera Region, Philippines and convenor, Task Force Women and Environment, Asia Pacific Forum on Women, Law and Development (APWLD)

and Tomoko Kashiwazaki

programme officer, Task Force Women and Environment and Rural Indigenous Women, APWLD

Rural women in Asia which include peasant, indigenous, fisherfolks, herders and farmworkers, have these as conditions under neo-liberal globalization:

In Thailand, small-scale farmers of soybean and cassava (two important cash and export crops) have come under heavy economic pressure (from cheap imports of soybean, export barriers and the development of alternative sources of cassava in western markets). Women farmers growing these two crops have to work longer and harder in the farms and also face greater health risks from increased use of pesticides to increase production.

In the Philippines, indigenous women farmers in the Cordillera who grow potatoes have faced the effects of the liberalization of the potato industry signaled by the lifting of the import ban on potato seeds in 1987 and the tariffication of potatoes as laid down in the Agreement on Agriculture under the WTO. Like the sisters in Thailand, women farmers in the Cordillera have to work longer hours in the farm (from 9 to 10 hours), face health treats due to the increasing use of pesticides to increase production and lack of access to credit and production assistance.

In Indonesia, cheap imports of rice and depressed domestic prices threatened the food security and livelihood of a large number of rice-growing small farmers in Indonesia. The government's "safety net", providing farming credit to farmers has been ineffective in its implementation. Women have been excluded from access to the credit by "village units" which decided on the loans, as women were not considered farmers because they are not involved in the plowing of the land.

In Sri Lanka, food imports increased since 1996, a year after the WTO was established. The increase in imports was followed by a decrease in food production resulting in the drop in rural employment. About 300,000 jobs were lost due to the drop in the production of onions and potatoes.

In India, in 10 villages in Tamil Nadu, the shift to flower production for exports has decreased the production of food crops and led to higher food prices, lower employment, lower income and lower food consumption among marginal farmers and landless women workers.

Contrary to the result sold by proponents globalization of economic upliftment and development, the result is increased hunger and poverty to most rural women not only in Asia but all over the world.

Climate change is a result of the unparalleled greed of imperialist governments and their corporations in their desire to control and plunder the world's remaining resources and amass

more wealth. Imperialist institutions like the WB-IMF-WTO have imposed upon poor governments development policies and packages which only tie third world nations to debts and impoverishment driving neo-colonial governments to offer their countries' natural wealth to capitalist countries and their corporations.

This world's sharing of resources is but a reflection of who consumes the most: the richest 20 per cent of the world grab more than 85 % of the world's income. The three wealthiest persons in the world have combined assets greater than the combined gross national product of the 48 poorest countries which have a total population of 600 million. The following further illustrates a comparative expense of rich and poor countries:

- \$6 billion --needed annually for the education of out of school youth all over the world
- \$8 billion --annual expenses of US for cosmetics
- \$9 billion --needed annually to provide water and sanitation to peoples of the world without running water
- \$11 billion --annual expenses of Europe for ice cream
- \$11 billion --needed annually for health and nutrition needs of peoples of the world who need assistance
- \$17 billion -- annual expenses for food of pets in Europe and the United States
- 25 gallons of gas for an SUV tank is enough to feed one family for a year

The capitalist culture of consumerism has reached women in far-flung villages through items which compete with local resources (e.g. instant coffee) or items which are not a necessity (fabric softener). The increasing poverty situation is also driving rural women and their families to expand their swiddens and agricultural farms thus clearing of forests and biodiversity areas, over gathering of forest and aquatic products for the market, engage in chemical-dependent agriculture, use of hazardous chemicals in small-scale mining, etc. The market driven-production also undermines good traditional practices of rural indigenous women and their communities in natural resource development and management to ensure a continuing source of livelihood and sustenance of their communities and maintaining a healthy balance of resources and consumption.

Climate Change Impacts on Rural Women:

Climate change scenarios predict adverse environmental and socio-economic consequences including frequency and intensity of heat waves, droughts, floods, and typhoons; altered ecosystems; reduced output and productivity of the agriculture, fishery and forestry sectors, loss of livelihood, food insecurity and diminished supplies; and heightened incidence of certain diseases and pests on people, animals and plants. The brunt of these will be borne by poor women and their communities who are most dependent on the land and natural resources for their food, livelihood, fuel and medicine yet less equipped to cope to natural disasters and weather variations. Women are particularly affected because of socially ascribed roles resulting from entrenched feudal-patriarchal discrimination on them. Rural women also take a heavy toll being the ones engaging in various remedies to make ends meet. This situation is compounding an already existing and deepening agrarian crisis linked to land concentration to landlords, rural underdevelopment, liberalization of agriculture and land conversion policies causing indebtedness and bankruptcy among peasant families. This situation forces women to migrate and find economic opportunities as far as overseas, or take on various forms of remedies subjecting them to different forms of violence.

Climate change manifested in change of weather pattern, frequent floods and or prolonged droughts, increased temperature, emergence of diseases and pests, affects women's crop and livestock production. This entails rural women to increase their working hours in collecting, storing, protecting and distributing water resources, and securing food production.

In the Philippines, Amihan (national federation of peasant women in the Philippines) noted three ways by which the climate change crisis disproportionately affects peasant women. First, peasant women have fewer assets to sell to cope when harvests collapse either because of floods or droughts because of lesser resources that they control and own. Second, more women than men fall into chronic indebtedness related to climate-induced crop failures because of micro-credit is largely targeted at women, and as managers of production and household expenses, they are under stronger pressure to bridge resource gaps. Third, during food shortages, it is usually the mother who gives up her share of food for the children and even for the husband.

Altered rain patterns with erratic monsoons disrupt planting seasons and adversely affect crop yields which has devastating consequences for livelihoods and economic security. Indigenous peasant women in the Cordillera region note an adjustment in their agricultural calendar to cope with the changes in rain and dry patterns. Rice planting season generally has been moved one to two months later from what used to be the schedule at least within the decade. There is a common observation of rise in temperature with occurrence of farm pests such as giant worms and the occurrence of dengue fever which was hardly heard in the region 20 years ago. While there is a general rise in temperature, sudden fall of temperature is observed during cold months (December to February).

Still in the Philippines, health problems include nutritional deficiencies and this has more than 50% correlation with climate change factors while TB, pneumonia, diarrhea, dengue and cholera have a 3—50% correlation. In 1998, malaria and other diseases increased significantly as a consequence of El Nino.

A number of studies and stories of rural women themselves, have determined that poor women are more vulnerable to natural disasters. While able to adapt and survive hostile conditions, facilities to support them during disasters are hardly available or accessible. Their shelters are the first to crumble during storms and earthquakes, their communities are usually inaccessible because of lack or absence of communication and transportation facilities. There is hardly food supply as food production is barely enough for daily subsistence on normal conditions. The vulnerability of women and children is illustrated by higher incidence of deaths during disasters.

The Tamil Nadu Women's Movement in India reported 551 deaths among women, 209 among children and 144 among men in 4 districts affected by the tsunami in 2004 in Tami Nadu. The report further mentioned that most women never learnt swimming and climbing trees and roofs—skills which proved to be vital for surviving in a disaster like the tsunami. Also, women tried to save their children and belongings instead of running to escape. Many women were caught in the fishing nets. Some men who had lost their wives in the tsunami resorted to alcohol and neglected their responsibilities towards their children. Some widowers remarried and the burden of domestic work and looking after smaller children was laid on the older daughter. In families that have lost their children, women were under great pressure to replace the dead children. The Indian government announced financial assistance to sterilized women of reproductive age to undergo recanalization surgery which was an additional pain and trauma to the surviving women. Some women were forced by their husband to undergo recanalization or they will be abandoned by their husbands. Some women were forced to go through

recanalization because they desperately needed Rs.200 (USD4.5) as payment by government to those who will undergo the operation.

Women comprised 90% of 140,000 who died in a cyclone in Bangladesh in 1991. It is a common experience among rural women in Asia that after a disaster, they become less mobile because they are the primary care-givers of their families or communities. After a disaster, women are more likely to become victims of domestic and sexual violence. House workload increases substantially after a disaster, forcing many girls to drop out of school to help with chores. Women become more vulnerable to health problems while coping with disasters. Mothers are oftentimes the last to have a share of the family's limited food supply making them prone to nutritional deficiencies, much more if they are pregnant or breastfeeding.

The Bigger Threats for Climate Change:

1.Large Corporate Mining:

Governments of mineral-rich countries in Asia have enacted national mining laws and policies in response to the World Bank's call of liberalizing the mining industry in the early 1990's. The Philippines has Philippine Mining Act of 1995, Mongolia has a National Mining Program enacted in 1997, Law of Management and Exploitation of Mineral Resources in Cambodia which was ratified in 2001. Similar mining laws are in place in Indonesia, India, Thailand, Bangladesh and other Asian countries. The common denominator is that these rich and powerful transnational corporations, whose interests steer multilateral financial institutions, exploit our countries' indebtedness in order to plunder our mineral wealth. The insatiable desire for profit, relentless capital repatriation, enjoying tax holidays and incentives and given all the rights (e.g. timber, water and eviction rights) drive mining transnational corporations (TNCs) to operate overseas as they do. Abetted by local business and corrupt governments in the developing countries, these corporations are fast depleting the mineral wealth of our countries and preventing opportunities for us to develop as they had.

Affected communities and organizations are witnesses to immediate and long term impacts of mining on people and the environment which include the following:

- Deforestation that affects the habitat and continued existence of hundreds of endemic and may be endangered species, impedes the constant flow of water from the forests towards other ecosystems and urban centers, causes rapid fluid runoff of rainwater, increasing flooding during rainy periods .
- Open pit mines and other surface impacts, and the consequent erosion and siltation of water systems, that continues to worsen from the heaps of rock residues or wastes from the mining process (tailings).
- Water depletion from enormous consumption of water by mining activities, drying up wells and springs, and depriving communities of their supply of water.
- Water contamination by acid mine drainage, that is, the drainage formed when typically highly acidic ores, like pyrites (FeSO_2) from surface mining, deep mining or coal refuse piles are exposed to air or water. A self-perpetuating acid material is generated that can go on for hundreds or even thousands of years, depending on the presence of these ores in the area. This liberates latent toxic chemicals (arsenic, mercury, cadmium and lead) in the soil, that when they reach water bodies can aggravate pollution and destroy almost all forms of aquatic life.

- Water contamination by hazardous chemicals used in the various stages of metal processing, such as cyanide, concentrated acids and alkaline compounds.
- Air pollution from dust generated by mining activities that may cause serious respiratory troubles or allergic reactions in people and asphyxia in plants and trees. The process also releases gases and toxic vapor from metal treatment, like sulphur dioxide – responsible for acid rain – and carbon dioxide and methane from burning of fossil fuels – two of the main greenhouse gases causing climate change.
- Noise pollution from the machinery used in mining and the blasting that creates conditions which become unbearable for the local population, the forest wildlife and worsens integrity of land forms.
- Depletion of forest resources as mining activities consume enormous quantities of wood for their construction
- When carried out in remote zones, mining activities imply major works such as road building (opening access to the forests), ports, mining villages, the deviation of rivers, construction of dams and energy generating plants.

2. Corporate Logging, Deforestation for Corporate Plantations and Bio-fuel Production

The common story of indigenous women who lived in once forested areas is—“the logging company came. After they took all the timber, the plantation (banana, pineapple, sugarcane, corn, oil palm, etc.) took over”. Women in mining communities have this common story—“the company logged the forests to build roads for a mining company. During the time of underground mining, the mining company used a lot of timber, hence logging was a necessary component in their operation. When mining technology shifted to open-pit mines, no tree is left standing as the whole area become a deep pit”.

20% of green gas emission is caused by deforestation. The net forest loss in South and Southeast Asia between 2000-2005 is 2.85 million hectares. This is an average of 0.98%, five times over the global rate of forest loss which is 0.18%. Two thirds of the forest loss in the region is taking place in Indonesia. Majority of these forests which are undergoing deforestation are in indigenous territories. This makes indigenous peoples to bear the heaviest brunt, more specially women who play an important role in resource management and use. Their extensive knowledge of the forest ecosystem and their communal systems of ownership and management ensured that these forests were sustained through thousand of years.

Palm oil is the world's best selling vegetable oil covering 56% of the total global trade of edible oil. Between 1997-2001, the world's biggest importers of palm oil were India, China, Pakistan, Netherlands, United Kingdom, Egypt and Germany. In 2001, the US became the second largest importer of palm kernel. With the new global demand for biofuels, crude palm oil is heavily promoted as biodiesel suited for countries like Japan and Europe. Their commitment to reduce greenhouse emissions under the Kyoto Protocol includes shift to alternative energy sources and support for the establishment of carbon sinks. The area covered by oil palm plantations has already reached 12 million hectares with four million in Malaysia and 5.3 million in Indonesia. These two countries are responsible for 85-90% of the world production of palm oil and 89% of global exports. Other countries in the Asia-Pacific which are significantly scaling up their production are Papua New Guinea, world's third largest palm oil exporter, Thailand, Philippines, Vietnam, Cambodia and India. There is now a trend of having jatropha in plantations as another

source for biofuel, in same countries in Asia where oil palm plantations exist and are expanding to other countries.

In both activities of mining, and logging and deforestation for plantations, indigenous women face the following problems: loss of habitat, livelihood and traditional knowledge including medicinal practices and resource management; water loss which greatly affect their livelihood and community sustenance; cultural disintegration and weakening of social cohesion; high incidence of diseases like malaria, TB, dengue; increased rate of sexually-transmitted diseases due to prostitution and exploitative relationships in mining, plantation or logging estates and, slave-like labor conditions. Women along the Buyat bay in Indonesia where the tailings of Newmont Mining Corporation is directly dumped, caused a great damage on the livelihood of their families and health of fisher women and children. Some children were born with physical deformities, and skin diseases were common among residents within the Buyat coastal communities. Women herders in Mongolia, complain of longer droughts. Mining activities have polluted and caused the drying up of hundreds of lakes in this herding country, noting that water is a very scarce resource in Mongolia.

Pollution of both water and land resources and loss of water resources are problems commonly experienced by peasant women as a result of logging and mining activities. In the island of Mindanao in the Philippines, peasant communities around banana plantations experience pest attacks on their farms and they attribute the pests from the plantations. Aerial pesticide spraying of plantations extend to a perimeter of 20 kilometers hence polluting and endangering the health and food resources of surrounding peasant communities.

Survival Strategies and Recommendations:

As dependents to land and natural resources, rural women since time immemorial have managed and developed systems to nurture these resources. Particularly among indigenous women, resource management is based on the worldview of communal ownership, sharing and responsibilities. This is lived by values such as, "let us not monopolize the good", "inayan" or "paniyo" (restrain or have fear on being greedy or evil) among Cordillera indigenous peoples and their counterparts in other indigenous peoples in Asia. Indigenous agricultural systems, enriching the land, hydrology, forest management systems, pest management systems, etc, are proven effective and sustainable compared to market-oriented systems which impose use of hazardous chemicals and mono-cropping of engineered or modified plant and animal varieties in large scale for the market, which damage the environment and cause climate change.

As survivors, rural women have developed mechanisms to cope when produce is low and when disasters happen. Traditional practices of cooperation and exchange labor (innabuyog, ubbo, baddang, alluyon in the Cordillera, Philippines; parma in Nepal) are useful systems of support in times of difficulty. Rural women have developed crop diversification, multiple cropping and intercropping practices, cultivation of appropriate crops which are resistant to floods and droughts, raising homestead and developing fishery in flood-prone areas, promoting alternative energy-related technology (solar, biogas, cooking stoves), adopting less labor-intensive technologies and investing in alternative irrigation facilities.

More than coping and developing survival strategies, rural women display their organized strength and will to prevent and stop extractive industries such as mining and logging, corporate plantations, market-oriented agricultural systems and aqua-culture in their territories. They continue to build their capacities in strengthening their organizations and leaders; in

negotiation, lobby and confrontations with corporations, agencies of the state and inter-government bodies and; linkages with other people's organizations/movements in various levels for solidarity and joint actions.

However, rural women also face the constraints of resources, technological support and capacity in confronting the challenges of climate change.

Financial resources on the climate change discourse hardly include women's needs while women contribute significantly in curbing climate change. Government policies and programs on the issue of climate change hardly include and consider women hence it is recommended to develop principles and procedures to protect and encourage women's access to national climate change mitigation and adaptation programs and projects. Further, it is also important to conduct impact assessments of adaptation and mitigation strategies of government and enable access of rural women's organizations of funds to further their strategies in curbing climate change.

Technological support should be available to rural women to include enhancement of appropriate technology and transfer of these to rural women. It is also important to have an exchange among rural women of Asia of appropriate technologies they developed to cope with climate change.

It is necessary to impress that women are powerful agents of change hence rural women's active participation should be enabled in all levels of strategies to adapt to climate change. The capacity of rural women has to be further strengthened to include equal access to negotiating, developing, managing and implementing adaptation and mitigation financing. It is also necessary to improve women's access to, control over natural resources in order to reduce poverty and vulnerability, to manage and conserve natural resources and to ensure that women have the resources to adapt properly. Development of training and educational programs for women and girls on the whole issue of climate change should be enabled including community-based approaches and strategies.

The biggest contribution of rural women against climate change is the continuing fight against extractive industries, market-oriented production and over-consumption while asserting effective and sustainable practices on land and natural resource control and development through collective efforts. The liability of imperialist governments, their corporations and their agencies including subservient governments of poor countries, should always be sharply pointed.

References:

1. Globalization and Women A Discussion Guide for Trainors, 2006, Judy M. Taguiwalo, APWLD
2. Gender Equality and Adaptation, Women's Environment and Development Organization
3. <http://www.madre.org/index.php?s=4&news=120>
4. Current Trends in World Mining, Frances Quimpo, July 2008 for APWLD Asia Consultation on Women and Mining
5. Indigenous Perspectives; 2007; Biofuels, Forests and Climate Change; Victoria Tauli-Corpuz and Parshuram Tamang
6. Tsunami Aftermath; 2006; Tamil Nadu Dalit Women's Movement and APWLD
7. Gender and Climate Change Finance, A Case Study in the Philippines for Heinrich Boll Stiftung and WEDO, November 2008, Athena Peralta
8. Action!Aid; South Asian Women Speak Out on Climate Change Adaptation; November 2007
9. Innabuyog field notes, published and unpublished
10. Unpublished notes, Cordillera Women's Education Action Research Center (CWEARC), 2008