

ASSIGNMENTS No.2

Q.1 Trace the history of Chipko movement and discuss the role of women in environmental protection.

Chipko movement, also called **Chipko andolan**, nonviolent social and ecological movement by rural villagers, particularly women, in [India](#) in the 1970s, aimed at protecting trees and forests [slated](#) for government-backed [logging](#). The movement originated in the Himalayan region of [Uttarakhand](#) (then part of [Uttar Pradesh](#)) in 1973 and quickly spread throughout the Indian [Himalayas](#). The Hindi word chipko means “to hug” or “to cling to” and reflects the demonstrators’ primary tactic of embracing trees to impede loggers.

Background

With the conclusion of the Sino-Indian border conflict in 1963, the Indian state of Uttar Pradesh experienced growth in development, especially in the rural Himalayan regions. The interior roads built for the conflict attracted many foreign-based logging companies that sought access to the region’s vast forest resources. Although the rural villagers depended heavily on the forests for subsistence—both directly, for food and fuel, and indirectly, for services such as [water purification](#) and soil stabilization—government policy prevented the villagers from managing the lands and [denied](#) them access to the [lumber](#). Many of the commercial logging endeavours were mismanaged, and the clear-cut forests led to lower agricultural yields, [erosion](#), depleted water resources, and increased [flooding](#) throughout much of the surrounding areas.

In 1964 environmentalist and Gandhian social activist Chandi Prasad Bhatt founded a cooperative organization, Dasholi Gram Swarajya Sangh (later renamed Dasholi Gram Swarajya Mandal [DGSM]), to foster small industries for rural villagers, using local resources. When industrial logging was linked to the severe monsoon floods that killed more than 200 people in the region in 1970, DGSM became a force of opposition against the large-scale industry. The first Chipko protest occurred near the village of Mandal in the upper Alaknanda valley in April 1973. The villagers, having been denied access to a small number of trees with which to build agricultural tools, were outraged when the government allotted a much larger plot to a sporting goods manufacturer. When their appeals were denied, Chandi Prasad Bhatt led villagers into the forest and embraced the trees to prevent logging. After many days of those protests, the government canceled the company’s logging permit and granted the original allotment requested by DGSM.

With the success in Mandal, DGSM workers and Sunderlal Bahuguna, a local environmentalist, began to share Chipko’s tactics with people in other villages throughout the region. One of the next major protests occurred in 1974 near the village of Reni, where more than 2,000 trees were scheduled to be felled. Following a large student-led demonstration, the government summoned the men of the surrounding villages to a nearby city for compensation, ostensibly to allow the loggers to proceed without confrontation. However, they were met with the women of the village, led by Gaura Devi, who refused to move out of the forest and eventually forced the loggers to withdraw. The action in Reni prompted the state government to establish a committee to investigate deforestation in the Alaknanda valley and ultimately led to a 10-year ban on commercial logging in the area.

The Chipko movement thus began to emerge as a peasant and women's movement for forest rights, though the various protests were largely decentralized and autonomous. In addition to the characteristic "tree hugging," Chipko protesters utilized a number of other techniques grounded in Mahatma Gandhi's concept of satyagraha (nonviolent resistance). For example, Bahuguna famously fasted for two weeks in 1974 to protest forest policy. In 1978, in the Advani forest in the Tehri Garhwal district, Chipko activist Dhoom Singh Negi fasted to protest the auctioning of the forest, while local women tied sacred threads around the trees and read from the Bhagavadgita. In other areas, chir pines (*Pinus roxburghii*) that had been tapped for resin were bandaged to protest their exploitation. In Pulna village in the Bhyundar valley in 1978, the women confiscated the loggers' tools and left receipts for them to be claimed if they withdrew from the forest. It is estimated that between 1972 and 1979, more than 150 villages were involved with the Chipko movement, resulting in 12 major protests and many minor confrontations in Uttarakhand. The movement's major success came in 1980, when an appeal from Bahuguna to Indian Prime Minister Indira Gandhi resulted in a 15-year ban on commercial felling in the Uttarakhand Himalayas. Similar bans were enacted in Himachal Pradesh and the former Uttaranchal. As the movement continued, protests became more project-oriented and expanded to include the entire ecology of the region, ultimately becoming the "Save Himalaya" movement. Between 1981 and 1983, Bahuguna marched 5,000 km (3,100 miles) across the Himalayas to bring the movement to prominence. Throughout the 1980s many protests were focused on the Tehri dam on the Bhagirathi River and various mining operations, resulting in the closure of at least one limestone quarry. Similarly, a massive reforestation effort led to the planting of more than one million trees in the region. In 2004 Chipko protests resumed in response to the lifting of the logging ban in Himachal Pradesh but were unsuccessful in its reenactment.

Q.2 What are the sociocultural factor that render women more vulnerable during natural disasters?

Natural disasters do not affect people equally. In fact, a vulnerability approach to disasters would suggest that inequalities in exposure and sensitivity to risk as well as inequalities in access to resources, capabilities, and opportunities systematically disadvantage certain groups of people, rendering them more vulnerable to the impact of natural disasters. In this article we address the specific vulnerability of girls and women with respect to mortality from natural disasters and their aftermath. Biological and physiological differences between the sexes are unlikely to explain large-scale gender differences in mortality rates. Social norms and role behaviors provide some further explanation, but what is likely to matter most is the everyday socioeconomic status of women. In a sample of up to 141 countries over the period 1981 to 2002 we analyze the effect of disaster strength and its interaction with the socioeconomic status of women on the change in the gender gap in life expectancy. We find, first, that natural disasters lower the life expectancy of women more than that of men. In other words, natural disasters (and their subsequent impact) on average kill more women than men or kill women at an earlier age than men. Since female life expectancy is generally higher than that of males, for most countries natural disasters narrow the gender gap in life expectancy. Second, the stronger the disaster (as

approximated by the number of people killed relative to population size), the stronger this effect on the gender gap in life expectancy. That is, major calamities lead to more severe impacts on female life expectancy (relative to that of males) than do smaller disasters. Third, the higher women's socioeconomic status, the weaker is this effect on the gender gap in life expectancy. Taken together our results show that it is the socially constructed gender-specific vulnerability of females built into everyday socioeconomic patterns that lead to the relatively higher female disaster mortality rates compared to men. The human impact of natural disasters is never entirely determined by nature, but is contingent on economic, cultural, and social relations. In this article we address one important, yet hitherto relatively neglected aspect of disasters (WHO 2002), namely the gendered nature of disaster vulnerability as revealed by gender-specific disaster mortality. Anderson (2000, 86), in a World Bank publication on managing disaster risk, is adamant that “much more research is needed to fully understand the extent to which gender plays a role in differential casualty rates.” This article's analysis provides an important step in that direction. Specifically, we analyze the impact of natural disasters on the gender gap in life expectancy, which is the difference between female and male life expectancy at birth (in most countries women live longer than men).

Our study takes seriously gender as an analytical category. We explain the differential impact of natural disasters on female relative to male life expectancy not merely by recourse to different physical exposures and biological or physiological gender differences, but also by the different socially constructed vulnerabilities that derive from the social roles men and women assume, voluntarily or involuntarily, as well as existing patterns of gender discrimination. Our study adopts a vulnerability approach to natural disasters as an analytical concept. Many disaster scholars subscribe to such an approach and have made significant contributions to its development (see, e.g., O'Keefe, Westgate, and Wisner 1976; Cuny 1983; Hewitt 1983; Cannon 1994, 2000; Varley 1994; Wisner et al. 1994, 2004; Cutter 1996; Fordham 2004). As Cutter (1996, 530) has pointed out, vulnerability “still means different things to different people.” We adopt the definition of vulnerability given in Wisner et al. (2004), in which an explanation of “the risks involved in disasters must be connected with the vulnerability created for many people through their normal existence,” and where vulnerability is defined as “the characteristics of a person or group and their situation influencing their capacity to anticipate, cope with, resist and recover from the impact of a natural hazard” (Wisner et al. 2004, 4, 11).¹ It follows that the impacts of natural disasters are never merely determined by nature on its own. Indeed, it becomes even questionable whether one can talk of “natural” disasters at all. Cannon (1994, 14) argues that “there are no generalized opportunities and risks in nature, but instead there are sets of unequal access to opportunities and unequal exposures to risks which are a consequence of the socio-economic system” (emphasis in the original). In other words, vulnerability, as used in this article, captures the differential exposure to risks and capacity to cope with risks systematically attributed to people across space and time, which, together with other attributes such as ethnicity or class, are often functions of an individual's gender, the focus of analysis here (see Cannon 1994; Wisner et al. 2004).

There is renewed interest in studying the social impacts of natural disasters across the social sciences. For example, economists have recently studied how a country's low level of economic development, poor quality of governance institutions, and high degree of inequality increase the death toll from earthquakes (Anbarci, Escaleras, and Register 2005) as well as from other types of natural disasters (Kahn 2005). Geographers, sociologists, and other social scientists have addressed the vulnerability of certain groups of people to natural disasters (see, among others, Cannon 1994, 2000; Wisner et al. 1994, 2004; Cutter 1996; Mustafa 2002 and references cited therein). Increasingly, even physical geographers and public health scholars acknowledge that a better mitigation of negative disaster impacts is contingent on a better understanding of the socially constructed vulnerabilities of specific groups of affected people (Noji 1997b; Alcántara-Ayala 2002; Degg and Chester 2005a, 2005b). Within the broader field of disaster and environmental change research, an emergent literature addresses the specific vulnerability of women (Cutter 1995; Bolin, Jackson, and Crist 1998; Enarson 1998, 2000; Enarson and Morrow 1998; Fothergill 1998; Fordham 2004; Bradshaw 2004; Enarson and Meyreles 2004).

Our original contribution is to provide the first systematic, quantitative analysis of gender differences in natural disaster mortality. This is of course only one aspect, but due to its far-reaching consequences (life or death) it is arguably the most important aspect of the gendered impact of natural disasters. Existing studies either do not estimate gender-specific mortality rates and patterns at all (Anbarci, Escaleras, and Register 2005; Kahn 2005) or are confined to single events such that no general conclusions can be drawn (Bern et al. 1993; Ikeda 1995; O'Hare 2001; Oxfam International 2005). It is only by quantitative analysis of mortality rates or summary mortality measures such as life expectancy that we can discern whether the anecdotal evidence captures a general trend. We believe that our contribution buttresses Cutter's (2003, 6) claim in her Presidential Address to the Association of American Geographers that "geography has added a technological sophistication to hazards research that is unrivalled among the social sciences" and that "the discipline is rapidly becoming the driving force behind vulnerability science".² In linking spatial patterns of disaster risk to human-generated vulnerability, geography is uniquely positioned to study the impact of natural disasters on socioeconomic systems and groups of people. One of the "most significant themes" listed by Cutter (2003, 7) is the need "to identify, delineate, and understand those driving forces that increase or decrease vulnerability at all scales." This study identifies one important driving force by demonstrating how low socioeconomic status renders women more vulnerable to the mortal impact of natural disasters.

Q.3 Can you relate the implications of the natural calamities and disasters for women in Pakistan?

A latest study says climate change induced disasters and left negative impacts on psychology and behaviour of people, in particular women, who bore the major brunt of various disasters that struck Sindh in recent years.

"There is evidence that shows interlinkages between climate change, health and sexual and reproductive health and rights (SRHR)," says the study titled 'Understanding climate change, impact on women's reproductive health: Post-disaster interventions in Sindh'.

The study was carried out by the Sindh Community Foundation and Asian-Pacific Resource and Research Centre for Women (ARROW).

The study selected Jacobabad, Shikarpur and Kashmore districts, which were among the worst affected areas in 2010 and 2011 floods. Besides, Thatta was taken for the 1999 cyclone and 2010 flood.

It said that Pakistan had been experiencing the effects of climate change, flash floods, drought and cyclones over the years as the country fell within the disaster-prone zone of South Asia.

The Global Climate Risk Index 1993-2012 released by German Watch ranked Pakistan as the 12th on the list of the states most affected by extreme weather conditions.

It said Sindh witnessed two consecutive floods in 2010 and heavy rains followed by flash floods in 2011.

“Of Pakistan’s four provinces, the 2010 floods are widely acknowledged to have hit Sindh worst. More than seven million people were affected including around half of the province’s rural population, and more than 2.5 million acres of agricultural land was flooded,” it said.

It said that nearly 350,000 homes were destroyed, leaving at least 1.5 million people homeless, causing displacement on a massive scale. The floodwaters also took longer to recede in Sindh than in other provinces.

“These two events exposed weaknesses in the health system to cope with such situations.”

The study said that climate change incidences directly impacted human lives, and negatively affected general, sexual and reproductive health.

It said disasters left the worst impact on women’s health, access to food security, and reproductive health experienced psychological stress during the flood, in camps and even after returning home.

The disasters did not rein in animosities among communities which was evident from the fact that three cases of honour killings were reported in Jacobabad.

Climate change incidents also directly impacted general, sexual and reproductive health during floods and disturbed the reproductive health of women, men and young people.

Some women staying in camps reported about one maternal and three infant deaths due to severe complications. Women also reported sexual harassment. Because of strong gender barriers and strict male dominance, women were not allowed to get food, access services at camps or even when they had returned home.

It said Sindh had the highest level of malnutrition even before the floods. Due to floods, women who were involved in agriculture lost their livelihoods because floodwater took extraordinary time to recede.

That resulted in poor yield of crop for the next year, thus it increased food insecurity and impacted on women’s and girls’ health. Access to livelihoods of women decreased because of the lack of alternative livelihoods skills.

“Girls and pregnant women are vulnerable to psychological fears. Women and girls felt insecure and psychologically fearful while staying in camps,” it noted.

Besides, women’s access to health revived slowly in rural areas as government health outlets lacked health facilities. There was lack of resources for economic revival of home-based women. Their economic recovery got delayed.

“Because of lack of proper shelter, women’s insecurity increased and a few cases of sexual violence were reported,” said the report.

It said that mobility of rural women suffered because of damages to community infrastructure like roads, streets, etc. Distribution points by the NGOs and private sector was not gender sensitised and appropriate, so women received lesser relief.

The report blamed environmental organisations for not being attentive to incorporating sexual and reproductive health and rights or women’s health in their regular programmes.

The report quoted UNFPA, which estimated that at least 1.2 million women of reproductive age were among the people affected by heavy monsoon rains and floods across Pakistan in 2010.

The maternal and child health services in at least 40 per cent of health facilities were disrupted. At least 115,000 were pregnant and every day close to 400 women went into labour, with at least 60 having life-threatening pregnancy-related complications.

Due to floods, women living in camps experienced difficulty in accessing reproductive health services and pregnant women did not get proper attention. Services for child delivery were not much provided by the government, NGOs and INGOs. Water for consumption was unhygienic; insecure environment in camps, lack of privacy for women especially pregnant women, in shelters and in toilets; faced waterborne diseases even after returning home; health-related infrastructure rebuilt slowly that increased maternal deaths; National Disaster Risk Reduction Policy did not have specific focus on reproductive health; and, in post disaster recovery, SRHR was not given focus even in rehabilitation and reconstruction phases by the government, NGOs and INGOs.

The health outlets and reproductive health services were given low attention, very few NGOs and international organisations provided reproductive health services to women in the districts of the research.

Q.4 How the process of urbanization has adversely affects the lives of people especially the women?

Urbanization and urban expansion result in urban environmental changes, and resident lifestyle changes, which can independently and synergistically lead to human health problems. The effects of urbanization on population health can hardly be attributed to any cause. The urban environment is an important determinant of health. Urbanization is a process of urban expansion caused by industrialization and economic development, and promotes economic growth by expanding demand. Industrialization intensifies the contradiction between environmental protection and economic growth and causes health problems, which reduce the harm of industrial waste gas emission to population health. Compared with rural areas, the positive effect of urbanization on health is reflected in the fact that cities have better employment opportunities and incomes, better educational and medical resources, and closer social ties. Therefore, urbanization can be regarded as one of the most pervasive social and economic forces affecting economic development, population health, and ecological health.

Chen et al. used a multilevel logistic model to study the impact of urbanization and economic development on individual health in China, and the results show that economic development has an impact on urbanization. The relationship between individual health and urbanization of different income groups presents an inverted U-shape. The effect of urbanization on population health in the eastern and central regions is significantly greater than in the western region, where urbanization increases life expectancy and improves health level of residents mainly by improving residents' health awareness, increasing medical resources, and improving the medical insurance system and public health infrastructure investment. Ademe et al. found that although there may be a series of problems in the urbanization process, efficient national governance can reduce the health problems faced by the social population. Liu and Sun used a logistic model to analyse the impact of the urbanization level on various diseases, and found that areas with high urbanization levels may possess better health and a better health status of the population. Liu et al. found that the ratio of infectious disease-related death rate and noninfectious disease-related death rate in the process of urbanization in China continued to decline over time. Brueckner stated that except for Sub Saharan Africa, the correlation between adult death rate and urbanization in other parts of the world is significantly negative; that is, the higher the level of urbanization is, the lower the death rate.

Urbanization in developing countries is usually accompanied by population migration to cities . Guest finds that rural-urban migration leads to inequality in economic opportunities, with greater economic progress in urban areas by researching Thailand. At the same time, however, cities need to strengthen health services for young people, especially women. Sonoda found that urbanization will affects women's physical health.

Q.5 Write note on the following:

a) Deforestation and environment

Deforestation refers to the decrease in forest areas across the world that are lost for other uses such as agricultural croplands, urbanization, or mining activities. Greatly accelerated by human activities since 1960, deforestation has been negatively affecting natural ecosystems, biodiversity, and the climate. Multiple factors, either of human or natural origin, cause deforestation. Natural factors include natural forest fires or parasite-caused diseases which can result in deforestation. Nevertheless, human activities are among the main causes of **global** deforestation. According to the **Food and Agriculture Organization (FAO)**, the expansion of agriculture caused nearly 80% of global deforestation, with the construction of infrastructures such as roads or dams, together with mining activities and urbanization, making up the remaining causes of deforestation. 1. Agriculture is the Number 1 Cause of Deforestation (~80%)

Why is deforestation happening? According to the **FAO**, agriculture causes around 80% of deforestation. And how does agriculture cause so much deforestation? According to the same report, 33% of agriculture-caused deforestation is a consequence of subsistence agriculture – such as local peasant agriculture in developing countries.

Commercial or industrial agriculture (field crops and livestock) cause around 40% of forest loss – in the search for space to grow food, fibers or biofuel (such as soybeans, palm oil, beef, rice, maize, cotton and sugar cane). It is also particularly interesting to note **livestock** is believed to be responsible for about 14% of global deforestation. The main reasons why have to do with the large areas require both to raise livestock but also to grow its (soy-based) food.

The construction of human infrastructures has also been driving deforestation. More specifically, 10% of deforestation can be attributed to new infrastructures that serve the current human lifestyle in four main ways: transportation, transformation and energy generation.

On one hand, roads, rails, ports or airports have been built to move all sorts of goods – from cereals and fruits to spices, minerals or fossil fuels – either directly to trade centers or to transformation sites. So while at first there were only fruit trees, roads soon arrived to allow transporting fruit to other regions. And while some goods were and are collected manually, others such as coal, oil, natural gas, biomass, but also meat, dairy or spirits, required the construction of large extraction, transportation and/or transformation infrastructures.

The populational shift that is leading people to move from rural areas to urban areas is also contributing to deforestation (5%, according to FAO). This urban growth – in which **68% of the world's population** is expected to live in cities by 2050 – is leading to an exponential growth of housing and consumption sites. And as cities become larger so they can host more people, they challenge the natural boundaries surrounding them, often leading to deforestation. This is one of the reasons why deforestation is happening.

The most known consequence of deforestation is its **threat to biodiversity**. In fact, forests represent some of the most veritable hubs of **biodiversity**. From mammals to birds, insects, amphibians or plants, the forest is home to many rare and fragile species. 80% of the Earth's land animals and plants live in forests.

By destroying the forests, human activities are putting entire ecosystems in danger, creating natural imbalances, and putting Life at threat. The natural world is complex, interconnected, and made of thousands of interdependencies and among other functions, trees provide shade and colder temperatures for animals and smaller trees or vegetation which may not survive with the heat of direct sunlight. Besides, trees also feeding animals with their fruits while providing them with food and shelter they need to survive

b) Sustainable development

Sustainable development is an approach to economic planning that attempts to foster economic growth while preserving the quality of the environment for future generations. Despite its enormous popularity in the last two decades of the 20th century, the concept of sustainable development proved difficult to apply in many cases, primarily because the results of long-term sustainability analyses depend on the particular resources focused upon. For example, a forest that will provide a sustained yield of timber in perpetuity may not support native bird populations, and a mineral deposit that will eventually be exhausted may nevertheless support more or less

sustainable communities. Sustainability was the focus of the 1992 Earth Summit and later was central to a multitude of environmental studies.

One of the most important areas of the law of sustainable development is ecotourism. Although tourism poses the threat of environmental harm from pollution and the overuse of natural resources, it also can create economic incentives for the preservation of the environment in developing countries and increase awareness of unique and fragile ecosystems throughout the world. In 1995 the World Conference on Sustainable Tourism, held on the island of Lanzarote in the Canary Islands, adopted a charter that encouraged the development of laws that would promote the dual goals of economic development through tourism and protection of the environment. Two years later, in the Malé Declaration on Sustainable Tourism, 27 Asian-Pacific countries pledged themselves to a set of principles that included fostering awareness of environmental ethics in tourism, reducing waste, promoting natural and cultural diversity, and supporting local economies and local community involvement. Highlighting the growing importance of sustainable tourism, the World Tourism Organization declared 2002 the International Year of Ecotourism.

Although numerous international environmental treaties have been concluded, effective agreements remain difficult to achieve for a variety of reasons. Because environmental problems ignore political boundaries, they can be adequately addressed only with the cooperation of numerous governments, among which there may be serious disagreements on important points of environmental policy. Furthermore, because the measures necessary to address environmental problems typically result in social and economic hardships in the countries that adopt them, many countries, particularly in the developing world, have been reluctant to enter into environmental treaties. Since the 1970s a growing number of environmental treaties have incorporated provisions designed to encourage their adoption by developing countries. Such measures include financial cooperation, technology transfer, and differential implementation schedules and obligations. The greatest challenge to the effectiveness of environmental treaties is compliance. Although treaties can attempt to enforce compliance through mechanisms such as sanctions, such measures usually are of limited usefulness, in part because countries in compliance with a treaty may be unwilling or unable to impose the sanctions called for by the treaty. In general, the threat of sanctions is less important to most countries than the possibility that by violating their international obligations they risk losing their good standing in the international community. Enforcement mechanisms other than sanctions have been difficult to establish, usually because they would require countries to cede significant aspects of their national sovereignty to foreign or international organizations. In most agreements, therefore, enforcement is treated as a domestic issue, an approach that effectively allows each country to define compliance in whatever way best serves its national interest. Despite this difficulty, international environmental treaties and agreements are likely to grow in importance as international environmental problems become more acute.

Many areas of international environmental law remain underdeveloped. Although international agreements have helped to make the laws and regulations applicable to some types of environmentally harmful activity more or

less consistent in different countries, those applicable to other such activities can differ in dramatic ways. Because in most cases the damage caused by environmentally harmful activities cannot be contained within national boundaries, the lack of consistency in the law has led to situations in which activities that are legal in some countries result in illegal or otherwise unacceptable levels of environmental damage in neighbouring countries.

Downloaded from Tajassus.com