

Globalization and Climate Change: It's Impact on Tribal lives and Livelihoods

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The greatest environmental challenge faced by the world today is that of climate change. Change processes like industrialisation, urbanisation, modern consumerist lifestyles and unsustainable patterns of development have significantly contributed towards the processes. The unprecedented economic growth in the nation-states under the globalized world order is leading towards irreversible damage to nature (Sakaram, 2008). In this critical juncture, the present society demands two fundamental commitments: that are: Environmental protection and sustainability. However, Developmental models deny these two basic commitments. Development has proved to be detrimental to nature than being protective, promotive and preservative for it. Development and environment synergy has become the focus of attention of the development and environment theorists, activists and practitioners of the contemporary millennium.

The dominant discourse on globalization tends to highlight on the promises of economic opportunity, sustainability, and equity and at the same time ensuring ecological responsibility. While the first trio have been achieved to some extent, the fourth one has remained untouched and at times ignored. Blind globalization has often ignored the fourth commitment and has often departed from synchronizing it within the ambit of its process and product. This has led to drastic ecological degradation in the place of ecological protection. When ecological protection is challenged the question of ecological sustainability remains a far off dream.

Professor Martin Khor (1981:47) observes: "The new trade rules leaves Third World countries with little ability to resist or protect themselves, or to seek alternative economic strategies." Political colonisation has been substituted by economic and environmental colonisation. Third world nations of the developing world are the worst sufferers of this colonisation. Environmental colonisation following the process of globalisation has resulted in rapid environmental degradation and climate change in the poor countries. It has impacted upon the life styles and livelihood of the local communities.

All these have contributed for changing the lifestyles, living standards of the milieu but rare thoughts are given to common properties, natural resources. This over exploitation and over exploration of the natural resources to satisfy natural need and greed has resulted in bringing ecological crisis to the planet. The World Bank comments the ecological crisis resulting in climate change is the greatest challenge millennium is facing.

Focus of the paper : Against this backdrop, the focus of the present paper is to

- Analyse the two dominant processes of contemporary era- Globalisation and Climate Change.
- To explicate how globalisation contributes to climate change.
- To locate the impact globalisation casts on the climate of the tribal areas and its repercussions on tribal lives and livelihood.
- Finally, to discover the way out to combine the unavoidable process of globalisation and preserving the traditional life styles and livelihood of the tribal's.

Locus of the study : The study is concentrated on the tribal districts of Odisha which are undergoing massive changes in the post globalization era due to continuous climate change. The tribal life and livelihood are thoroughly associated with nature and therefore witness sea changes due to the ecological degradation resulting from the process of technological up gradation following the process of globalization.

Source Materials : The entire literature used in the paper is based on an overview of literature relating to globalisation, climate change and tribal life.

Globalisation Defined:

Globalisation is a historic process having its root in the third century B.C. But the products are witnessed in a greater depth and dimension in the present century. One of the most spectacular effects is in terms of sinking space and time. The collapse of national borders has resulted in challenging the national sovereignty and increasing the western hegemony.

Globalization is the big economic event of the 1990s. Globalization promises benefits galore, jobs and prosperity for Third World countries, global markets for American and other First World companies, cheap imports for U.S. consumers, cost-cutting pressures that will force "firms everywhere to be more efficient. (Chicago Tribune, 10/28/97)

Globalization is a process of interaction and integration among the people, companies, and governments of different nations, a process driven by international trade and investment and aided by information technology. This process has effects on the environment, on culture, on political systems, on economic development and prosperity, and on human physical well-being in societies around the world.

Scholte provides a five-fold description of the process of globalisation. They are:

Globalization as internationalization- Globalisation describes cross-border relations between countries. It describes the growth in international exchange and interdependence.

Globalization as liberalization- It implies removing government imposed restrictions on movements between countries.

Globalization as universalization-It refers to a process of spreading ideas and experiences to people in all corners of the earth so that aspirations and experiences around the world become harmonized and homogenised.

Globalization as westernization or modernization- Western values becoming the dominant ideas in the third world nations bringing a degree of modernity in the attitude, beliefs and practices of the people of the hither to developing societies.

Globalization as deterritorialization- It is a process of the reconfiguration of geography, so that social space is no longer wholly mapped in terms of territorial places, territorial distances and territorial borders. It basically refers to the process of collapse of national boundaries.

Globalisation is not confined to the processes mentioned above. To quote Anthony Giddens (1990: 64) globalization is 'the intensification of worldwide social relations which link distant localities in such a way that local happenings are shaped by events occurring many miles away and vice versa'.

Another interpretation of globalisation that has implications on this issue can be discussed from its dimensions. Globalization has powerful economic, political, cultural and social dimensions. These are:

- De-localization and supra territoriality;
- The speed and power of technological innovation and the associated growth of risk
- The rise of multinational corporations; and
- The extent to which it moves towards the creation of (global) free markets to leads to instability and division.

Climate Change: A Conceptual Analysis

Climate change is the long-term shift in weather patterns in a specific region or globally. The United Nation's Framework Convention on Climate Change (UNFCCC) defines climate change as "a change of climate that is attributed directly or indirectly to human activity that alters the composition of the global atmosphere, and that is in addition to natural climate variability over comparable time periods". Climate change is a long-term shift in the statistics of the weather (including its averages). To cite an example the last decade of the 20th Century and the beginning of the 21st have been the warmest period in the entire global instrumental temperature record (NOAA, National Weather Service). The impacts of climate change include:

- Increased surface temperature
- Rises in sea levels
- Retreat of glaciers and melting of sea ice
- Changes in precipitation
- Increases in intensity of extreme weather events such as heat waves, tornadoes, hurricanes, and heavy rainfall
- Longer, more severe droughts
- Expansion of subtropical deserts
- Species endangerment and extinction and loss of biodiversity
- Melting of permafrost (which speeds global warming)
- Drops in agricultural yields
- Spread of vector-borne diseases because of increased range of insects
- Acidification of oceans creating drops in fishing yields and death of coral reefs

Climate change is a normal part of the Earth's natural variability, which is related to interactions among the atmosphere, ocean, and land, as well as changes in the amount of solar radiation reaching the earth. The Fourth Assessment Report of the Intergovernmental Panel on Climate Change concludes, "that most of the observed increase in the globally averaged temperature since the mid-20th century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations."

Scientists and policy makers have become embroiled in extensive debates about potential changes brought about by an increase in anthropogenic greenhouse gas emissions, along with strategies for mitigation and adaptation.

Globalisation and Climate Change: The Propeller and the Propelled

Globalisation has accelerated the problem of climate change. It has given a boost to production, increased consumption and trade. It has established a market driven identity for the nations and to capture the international markets. The quantum of production has increased, a drive for consumption is launched. People in the process have become blind to environment protection and sustainability. This has proved hazardous to environment and has become the emanating point of climate change.

Climate change is emerging as one of the most challenging problems facing the world in the 21st century. Assessments of the global and regional impacts of climate change have formed the cornerstone for climate policy debates. Underlying these debates is the recognition that some areas are more vulnerable to climate change than others. To add further complexity to the picture, climate change is taking place within a rapidly changing world. In particular, on-going processes of economic globalization are modifying or exacerbating existing vulnerabilities to climate change.

Though globalization and climate change are both considered important areas for contemporary research, few studies have considered the two issues together. Impact studies are quite limited. Much attention has been focused on globalization in terms of trade liberalization, and its implications for the environment (Bredahl et al., 1996; Esty, 1995; Krissol et al., 1996; OECD, 1997a, b; Rauscher, 1997).

Some studies relate to environmental governance, economic competitiveness, foreign investment, sectorial economic policies, technological change, business strategies, employment, and environmental policies. Environment relationships, OECD (1997a, p. 17) notes that quantitative evidence is currently lacking on virtually all components of the relationship.

A number of studies have addressed the role of global corporations in fostering climatic change. Mason (1997), Robbins (1996) and UNCTC (1992) each examine the environmental practices of transnational corporations (TNCs) and their contribution to greenhouse gas emissions. Robbins (1996) and UNCTC (1992) find that TNCs are major contributors to global emissions of greenhouse gases. Mason (1997) looks at the emissions patterns and environmental impacts of TNC activity. While each of these studies provides important insights into the causes of climatic change, they do not address the joint impacts that globalization and climatic change may have for regions, sectors, ecosystems or social groups. Reilly et al. (1994) do note, however, that economic restructuring could intensify the effects of climate change through a marginalization of production conditions.

According to OECD report, following are the impacts of globalization on climate change:

- **Climate change stems mostly from the greenhouse effect** – meaning the excessive retention of solar energy in the atmosphere due to an accumulation of certain gases, particularly CO₂. The main sources of CO₂ emissions are industrial production, transportation and, more indirectly, deforestation. These three human activities exist independently of globalisation, but their considerable development during the 20th century, and in particular in recent decades, are partly linked to accelerated globalisation.
- **Globalisation promotes CO₂ emissions from transport.** As critical drivers of globalisation, transport systems have multiplied alongside international trade. Transport sector is responsible for approximately 23% of total energy-related to CO₂ emission (IPCC, 2013). From a cultural front as there is a growth in conspicuous consumption, therefore there is a shift from public means of transport to private ones.
- **Globalisation indirectly promotes CO₂ emissions linked to industrial activity and consumption.** While the Industrial Revolution was a vector of globalization, the growth in cross-border trade and investment in turn fostered industrial activity. This is often a major

source of GHG emissions, as in the case of electricity generation, which still largely involves burning coal, oil and derivatives. The intensification of globalisation, then, accentuated the greenhouse effect and global warming. For decades, developed countries – the pioneers of global industrialisation – were the world’s biggest polluters, responsible for the lion’s share of GHG emissions. Today, the United States is responsible for around 20% of global GHG emissions. But the very rapid development of emerging countries over the past several years has also led them to become major emitters of GHG.

- **Globalisation encourages deforestation.** Deforestation is an indirect but very significant cause of the greenhouse effect. Globalisation is often an ally of the chainsaw. Deforestation is mainly due to the conversion of forests into agricultural land, especially in developing countries. Take Brazil: for a little over a decade, much of its agriculture was export-oriented. Between 1996 and 2003, Brazilian soy exports to China rocketed from 15 000 to 6 million tons. This dynamism involved deforestation and converting part of the rainforest into farmland. Like much of the damage caused to the environment, the impact of deforestation isn’t only felt by nature itself, but also by people, in particular the most vulnerable. The poorest regions are the most affected by global warming. In the medium term, the UN doesn’t rule out a poverty boom stemming from desertification and increasingly scarce water.
- **By impoverishing biodiversity** A large number of species have become extinct in recent decades. Again, the link between the extinction of some species and globalisation is indirect. Human activities (particularly industry, because of its pollution of ecosystems), urban sprawl, farms and mining – which displace certain species – are not in and of themselves the result of globalisation. But globalisation implies the multiplication of distribution channels, creating new needs and new demand for products that are used around the world. It accentuates industrialization and the quest for and exploitation of new lands, subsoil and resources, thus weakening many ecosystems.

Globalisation and Tribal

Globalization no doubt results in climate change due to unchecked production, use of natural resources through deforestation, emissions. This brings vulnerability for the people and the planet. Vulnerability varies across space, as well as across social groups, communities and cultures. The most vulnerable are considered those who are most exposed to perturbations, who possess a limited coping capacity, and who are least resilient to recovery (Bohle et al., 1994). Other definitions of vulnerability focus on concepts of marginality, susceptibility, adaptability, fragility, and risk (Liverman, 1994). All these definitions put the tribal in the forefront of the target groups of climate change.

Tribal are marginal; their natural dwellings make them susceptible to climate change. Their traditional lifestyle without proper knowledge, attitude and capacity make them less adaptable to climate change. They are fragile and the degree of risk is far reaching on them because of their over dependence on nature and lack of alternative livelihood patterns and lack of mobility among them.

In further exploring the concept of vulnerability, Liverman (1994) distinguishes between biophysical vulnerability and social vulnerability. From a climate change perspective, according to the IPCC, biophysical vulnerability is “the degree to which a system is susceptible to or unable to cope with, adverse effects of climate change, including climate variability and extremes”. The three components of biophysical vulnerability, according to the IPCC definition are: exposure, sensitivity, adaptive capacity. The UNDR0 (1982) defines biophysical vulnerability as the degree of loss to a given element or set of elements at risk resulting from the occurrence of a natural phenomenon of a given magnitude. To quote Bogard (1989) vulnerability is operationally defined as the inability to

take effective measures to insure against losses. When applied to individuals, vulnerability is a consequence of the impossibility or improbability of effective mitigation and is a function of our ability to detect the hazards. Thus, biophysical vulnerability refers to the overall inability of the organism and the eco system to adapt to climate change for which they encounter enormous risks and tragedies.

Social vulnerability on the other hand refers to the inability of people, organizations, and societies to withstand adverse impacts from climate change. Their institutions, interactions and cultural values as well as practices are stressed due to climate change. Tribal life encounters both types of vulnerabilities in the process of climate change.

Impact of Globalisation on Climate Change in Tribal Areas of Odisha Affecting the lifestyles and livelihood of the Tribal's

Odisha is a tribal dominated state of the Indian subcontinent. It is a home to sixty two tribal groups out of which 13 is recognised as primitive tribal groups. Scheduled Tribes constitute nearly 22.21 % of the total population of Orissa. Nearly half the State's area (44.70 %) is under Schedule V of the Indian constitution, with a total population of 8,870,884 (1991 census), out of which 68% is constituted by tribal population. The north-western districts (Sundergarh, Keonjhar, and Mayurbhanj) account for 35.3 percent of Orissa's tribal population and the south-western districts (Korapat, Kalahandi, Phulbani, and Balangir) account for another 39.4 per cent. (Human Development Report 2004, Government of Orissa. UNDP)

With the process of globalisation; the state has witnesses an intensification of industrialization, urbanization, prevalence of cash economy and market expansion. Industrialisation and urbanisation have extended their roots into the remote tribal areas of the state and cash economy has percolated into tribal world of the state in the period following the introduction of globalisation. All these have greatly affected tribal livelihoods. Tribal are found to be struggling between transitions from nature based economy to a market based economy, from subsistence to a surplus economy. The destruction bio-mass to meet the urban and industrial needs leading to deforestation is having a major impact on the lives of peoples who live within the non-monetized, biomass based subsistence economic (Mishra, 2005). Along with the introduction of different developmental policies and programmes, changes in the land tenure have brought certain changes in the traditional system of resource management in tribal India. Further, the intrusion of non-tribes into tribal areas has disturbed the age-old organic unity of tribes. All these changes have had a telling effect on the natural resource bases and their management. The main form of decline is due to privatization of Common Property Resources (CPRs). All these speak of the biophysical vulnerabilities encountered by the tribal communities.

In present days the issue of livelihood has become a burning topic in the context of tribal communities. Since centuries the tribal communities who have been living in and around the forests, practicing hunting and gathering activities, fishing and shifting cultivation have faced difficulties in their survival in the context of climate change. The entire tribal livelihood is nature dependent and nature driven. Traditionally they depended on forest resources for their livelihoods. For these people, forests are an important source of livelihood and means of survival (Saxena 1999). The entire tribal livelihood is nature dependent and nature driven. Traditionally they depend on forest resources for their livelihoods. Fernandes et al (1984) argue that the destruction of forests over the past few decades has deprived tribes of their livelihood, particularly source of food. It has also resulted in their impoverishment, indebtedness and in many cases land alienation and even bondage (Fernandes and Menon, 1987). These studies basically describe the economy of tribes in a changed ecological context but fail to trace the path of transition.

Tribal are primarily agriculturist. Their culture is intimately related to the surrounding environment. There is a significant degree of harmony between tribal culture and their natural environment. The tribal milieu have a high reverence for nature as they are reared up in the lap of

nature, sustained by nature, have their cultural observations in the midst of nature. They perceive themselves as the off springs of nature and they never try to torture nature or establish their supremacy over nature. Their construction of houses, household's items and other artefact too show a linkage with the environment. The tribal household includes such items as mats, cots, wooden stools, baskets, cup plates, cushions, rope, mortar and pestle and oil presses. All of these are made from forest products. Umbrellas are made with the handle and ribs of bamboo, covered with gungu leaves. Even the hooded waterproof is made of the gungu lives. Thus, to the tribal nature plays the role of a mother.

But the post globalisation scenario is changing tribal dependency on nature for livelihood. Orissa is extremely rich in minerals, most of which lies in the tribal districts. The hilly terrain and availability of water also makes them suitable for reservoirs and dams. The major dams taken up in Scheduled areas are the Machkund, Salandi, Balimela, Upper Kolab, Indrawati, Mandira etc in the pre globalisation period. The major industrial projects taken up in scheduled areas have been the Raurkela Steel Plant, NALCO's Alumina refinery at Damanjodi, HAL, Sunabeda which are tribal dominated in character. Large number of future industrial projects is under implementation or proposed in scheduled areas including the alumina refineries of UAIL in Kashipur and Vedanta at Lanjigarh.

According to Kundan kumar, Odisha's rich mineral deposits are noted in tribal belts. The bauxite deposits are all located on top of the highest mountains in South Orissa which are called Malis, and are sacred to tribal as they are source of large number of perennial streams. These streams are vital to local tribal as they are often the only source of water for drinking and irrigation of fields in summer season, and sustain the local agricultural economy. The resistance of Kashipur tribal against UAIL's mining project and alumina refinery has been going on for over 10 years now. Similarly, flashpoints are building up near proposed bauxite mining on Niyamgiri by Vedanta, Sungen by L&T, Kodingamali by Aditya Aluminium and Maliparbat by Hindalco. The exposure of the tribal people to climate change is very high.

With the MOUS signed by the government with the multinational companies and the vigorous industrial expansion policy of the government, the tribal areas which remained untouched and untraded by the alien communities and companies are now under the control of such companies. This displaces the tribal masses from their native habitations and put them in the areas where they are debarred from their control over land and forest. The government policies of land acquisition for instituting mega industries have debarred the tribal from the land and forest on which they had absolute command and which were the chief source of their livelihood. This brings a great challenge to their livelihood. Their traditional livelihood is lost and their transition to alternative livelihood becomes difficult without adequate skill, knowledge and training. To cite some examples from Odisha itself, Utkal Alumina International Ltd. (UAIL) at Kashipur and the Vedanta Aluminium Ltd. (VAL) at Lanjigarh have witnessed the displacement of tribal and affecting their traditional livelihood to a great extent. The tribal exposure to globalisation has increased and climate change comes with the deforestation, emissions taking place by industrial activities. Their sensitivity to such changes is highly perceivable because of the sudden transition from a nature based eco friendly economy to an artificially induced production system which is hazardous to their environment.

Globalisation has introduced the concept of eco tourism and ethnic tourism. The richness of forests and wildlife has also led to increasing number of protected areas (wildlife sanctuaries and National parks) in the scheduled areas of Orissa to strengthen the tourism industry. Further, the tribal of the state are showcased and their little traditions are projected for ethnic tourism. Such protected areas have created a major problem as the rights of all inhabitants in and around these areas in the forest and forest land is being extinguished, affecting their livelihoods and sometimes leading to displacements.

Globalisation also has promoted patenting of indigenous medicines. This has turned the world's eyes towards the tribal habitat. The tribal flora and fauna have a rich deposit of trees and plants of medicinal value and the tribal folk knowledge of them is superb and unchallengeable. This has led foreign companies to penetrate into tribal areas and explore and use their folk knowledge to collect these rare plant species. In the process the forests are cut and deforestation is a great loss to climate and tribal livelihood. Commercialisation of tribal forests and tribal folk knowledge challenges their livelihood and traditional life styles. The simple tribal life is now commercialised and consumerised.

Globalisation has also introduced sex tourism and flesh trade. To strengthen the industry, the rate of women trafficking has increased in the post globalisation period. The borderless world and loosening national sovereignty have promoted this. The most effected tribal districts are Malkangiri, Nayagarh, Kendrapara, Nabarangpur, Nuapada, Korapat and Rayagada (Shakti, 2004). The House Committee on Women and Child Welfare (1999-2000) of the Orissa Assembly formally acknowledged that immoral trafficking of girls by brokers or agencies, on the pretext of providing employment as well as arranging marriage, has been rampant in the Kalahandi, Balangir and Mayurbhanj districts. Besides, six districts have been reported to be a source or operational area for trafficking of women either as source or operational area have been reported from the other 6 districts also namely Sundergarh, Deogarh, Baragarh, Sambalpur, Keonjhar, Malkangiri. All these are tribal districts of the state (Pandey, Jena, Mohanty, 2003). Thus, tribal women have adopted this loose means of livelihood in the post globalisation period to earn their livelihood. Climate change has compelled them to get into grinding poverty and to survive the onslaughts of globalisation and climate change, they have co-modified their body to match into an extremely consumerist world which negates the simplicity of tribal culture

Globalisation and subsequent climate change have impoverished the tribal communities. The marginalisation of the tribes is aggravating every now and then. Various poverty indicators and access indicators reveal that around 63% are poor and 17% are very poor (OTELP survey in their program area).

Migration is another off shoot of the process of globalisation and climate change affecting tribal livelihood in the state. According to the 64th NSS round, the migration prone districts of Odisha are Ganjam, Malkangiri, Korapat, Gajapati, Korapat, Kalahandi, Nuapada, Boudh, Bolangir, Sonapur, Bargarh, Phulbani, Sudergarh, Keonjhar, Mayurbhanj which are essentially tribal dominated in nature.

The way out

There is a need to develop and strengthen institutions at the grass root level and emphasis should be placed on creating community investment and livelihood promotion for combating the dual effects of globalization and climate change.

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| <ul style="list-style-type: none"> • There should be a Project Orientation workshop, either by Government or NGOs for tribal community at Gram Panchayat level where issues concerning globalization and climate change can be discussed with the tribal leaders and then, subsequently with the people. • A Federation can be formed consisting of the tribal and support should be given to strengthen and expand these federations at various levels. The initial needs should be identified and at every subsequent stages, assessment and review of the progress should be done. • Tribal communities should be provided with information and rules, through appropriate channels/medium regarding the various economic policies, new markets, sustainable livelihood strategies that can mitigate the adverse impacts of climate change and benefit from economic liberalization and globalization. |
| <ul style="list-style-type: none"> • At initial stage, key tribal spokespersons and opinion leaders should be identified and issues that concern them should be discussed, strategies should be framed and their suggestions should be taken into account. After giving proper training, various roles should be assigned to the tribal, either in the federation or SHG. |
| <ul style="list-style-type: none"> • Training programs should be conducted for Cluster Coordinators and Community Resource Persons on the importance of women's participation in developmental activities, so that they can make the field functionaries and tribal community aware about the role of women. They should be given requisite skills and expertise to work with all sections of the people in tribal areas. |
| <ul style="list-style-type: none"> • There should be Self Help Groups for tribal in villages/habitations exclusively inhabited by tribal groups and separate SHGs for Tribal and non-Tribal in mixed villages and there should be equal representation of tribal groups in federations. • Tribal communities should be encouraged to be part of the SHGs so that they can receive additional training on key issues confronting them and a platform can be created for exchange of knowledge. For up gradation of their skills and knowledge and to enhance their expertise, exposure visits and training workshops should be conducted for tribal SHGs and federation members. |
| <ul style="list-style-type: none"> • There should be identification of destitute, vulnerable, disabled, widows, etc. through community process as they are most susceptible to harmful effects of climate change and globalization. • Vulnerability and adaptive capacity of the tribal should be mapped. |

Community Investment Fund

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| <ul style="list-style-type: none"> • Tribal groups should be included and given priority in Inclusion fund • Assessment of sustainable tribal livelihoods - There is a symbiotic relationship between |
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tribal and natural resources. Therefore, one of the important tasks is to work in close association with the tribal communities in the protection, conservation, regeneration and sustainable development of the natural resources. This will mutually benefit developing natural resources-based livelihood enterprises and options. Therefore, nothing should be imposed on them and there should be screening of Micro Investment Planning's (MIPs) and other projects for adverse effects on tribal land rights and livelihoods.

- Workshop and training programmes should be conducted to sensitize the tribal on livelihoods, asset management and investment planning.
- Separate tribal plan for villages where the tribal population is greater than 30%.
- Proper training and support must necessarily be provide to Self Help Groups and Gram Panchayat Level Federation to support pro-poor investment planning.

Livelihood Promotion

- As a part of capacity building, training should be given to the producers for diversification of livelihoods, up gradation of skills and expertise on remunerative agriculture and collection of NTFP (Non Timber Forest Produce), latest techniques of production.
- As tribal are entirely dependent on natural resources, there should be formation of Natural Resource Protection Committees for protecting, conserving and sustaining them.
- Market linkages must be identified to help producers sell their products and simultaneously a demand survey should be done for tribal products, proper marketing strategies should be adopted, assistance should be provided for purchasing locally available material and also for innovations that contribute to tribal livelihoods.
- Climate resilient agriculture should be promoted.
- There must be identification of rural youth who should be given proper training for securing employment.

Globalization and Climate Change both act as “Double Exposure” for tribal and affect their lives and livelihood. Both the processes have both long-term changes and short term impacts that will have differential impacts. Despite a widespread recognition that tribal will be at losing end because of both climate change and globalization, the two issues are rarely examined together. There are instances where climate change couples with globalization to influence social, economic, and ecological processes in compound, multi-directional, and potentially unexpected ways. Tribal will be hard hit by this because they have a symbiotic relationship with the nature. There is not only a need to study the cause effect relationship between climate change and globalization but also how the two global process, climate change and globalization affect the already marginalized and vulnerable tribal.

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