

Globalisation in Mountain Context: Risks and Opportunities*

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Introduction

Put in simple terms economic globalization implies adoption and promotion of market friendly and market driven economic and trade policies and practices directed to closer integration of economic activities at global to regional levels. It differs from the conventional commercialization processes, in terms of speed, inter-connections of activities, incentives and pressures affecting the trading partners at different levels as well as the institutional mechanisms such as WTO to enforce the norms and rules of integration and interactions, in keeping with the primacy to market and reduced role of state and community, in regulating, coordinating and linking different economic transactions. The said processes carry both risks and opportunities for the participants, though the participants less prepared for this, such as the mountain regions and communities, face greater risks at least in the short run. This paper addresses the above issues through highlighting the involved conceptual issues supplemented by relevant stakeholders' views and responses to globalization led changes, taking place at different levels in the selected areas of HK-H countries, covered by a brief exploratory study by ICIMOD (Jodha 2002a).

To explore and understand prospects and challenges of globalization led or influenced integration and exchange patterns involving mountain areas, it will be helpful to allude to some basics underlying the processes of exchange systems involving resources, products, services etc. To begin with the exchange (on varying terms of trade) between two or more trading partners takes place because they are differently endowed in terms of their natural and manmade resources and facilities, which give rise to differences in opportunities and constraints associated with the exchanged components. These differences determine the level of comparative advantages inducing exchange (including barter system) involving different trading partners.

In the mountain context the said opportunities and constraint as well as the economic integration patterns and exchange processes are created or crucially affected by the key mountain conditions termed as mountain specificities, which broadly differentiate mountains from plains. They include: inaccessibility or limited accessibility, high degree of fragility, marginality, diversity, niche-opportunities and human adaptations to the above conditions. It may be added that a number of the above mountain specificities have both natural as well as social dimensions, and they also exhibit intra-mountain differences. For instance, all mountain areas are neither equally fragile nor equally inaccessible. However, these variables crucially influence the pace and patterns of integration and exchange systems involving mountain areas.

To understand the role and impact of mountain specificities on exchange opportunities and their underlying economic and related integration patterns, we briefly digress in to the indicative factors or circumstances which contribute towards the vary initiation and conduct of exchange processes.

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The Exchange Process: The Basics and the Mountain Context

- (a) *Products, production and support facilities:* Though the very difference in terms of type of potentially tradable products, services and the resources, is the first prerequisite for exchange to take place, their productivity, and surplus generation for exchange are equally important.

As a second set of circumstances to help exchange relates to both natural and human capacities to facilitate fulfillment of the above conditions. This may include availability, access to, and scope for application of relevant technologies and inputs to enhance productivity and surplus of tradable items.

- (b) *Post-production activities and facilities:* Beyond the above largely primary sector related conditions, there are other indicative requirements to make exchange as an effective process. They relate to internal and external market links including: physical mobility, availability and access to information, capacity and entrepreneurship to mobilize needed investments, effective management of risks and promotion of value adding activities for harnessing own comparative advantages through exchange. Finally, it involves institutional and technical arrangements conducive to all the above requirements.

One can look at the broad mountain situation in the context of above mentioned indicative circumstances or pre-requisites for an effective and beneficial exchange process. This could be done by juxtaposing the above mentioned pre-requisites for effective exchange processes and the imperatives of mountain specificities.

Assessed through the lens of basic prerequisites of trade and exchange, mountain areas are endowed with rich potential due to specific niche (resources, products and services) and vast extent of diversities characterizing their resource base and production possibilities. Timber, a range of NTFPs, minerals, water and hydropower, variety of agricultural and horticultural products and seasonally differentiated environmental services are well recognized items, which potentially impart comparative advantage to mountain areas in the context of national and international trade. However, a closer look would suggest that the above mentioned are manifestation of ecological or nature-endowed niche of mountain areas, which in reality are not adequately complemented by socio-economic components of niche, to facilitate effective harnessing of ecological niche. In other words, while mountain niche and diversities offer vast potential for exchange-led development, its realization is impeded by other mountain specificities such as fragility, inaccessibility, marginality (and their missing management). Efforts to promote exchange systems without addressing these constraints, generally prove exploitative and have serious backlash effects on mountain areas, which in turn, as the supplier of traded items, acquire the status of hinterlands rather than integral parts of the economic system (Jodha 2001). Tables 1 and 2 briefly summarise the situation.

Table 1: Mountain Specificities and their Indicative Exchange Affecting Imperatives

Limited Accessibility	
a) Product of	<ul style="list-style-type: none"> • Slope, altitude, terrain, seasonal hazards, and so on (and lack of prior investment to overcome them)
b) Manifestations and implications (i.e., impeding effective economic integration and exchange processes)	<ul style="list-style-type: none"> • Isolation, semi-closedness, poor mobility, high cost of: mobility, infrastructural logistics, support systems, and production/exchange activities • Limited access to, and dependability of, external support (products, inputs, resources, experiences) • Detrimental to harnessing niche and gains from trade, invisibility of problems/ potentials to outsiders
c) Imperatives (appropriate responses, adaptation approaches to reduce impacts of (b))	<ul style="list-style-type: none"> • Local resource centred, diversified production/consumption activities fitting to spatial and temporal opportunities and constraints • Local regeneration of resources, protection, regulated use; recycling etc. • Focus on low-weight/volume and high-value products for trade • Nature and scale of operations as permitted by the degree of accessibility/ mobility and local availability of resources • Development interventions with a focus on: Decentralization and local participation: reduction of inaccessibility with sensitivity to other mountain conditions (e.g., fragility) and changed development norms and investment yardsticks
Fragility and Marginality	
a) Product of	<ul style="list-style-type: none"> • Combined operations of slope/altitude, and geologic, edaphic, and biotic factors; biophysical constraints create socio-economic marginality
b) Manifestations and implications (i.e. promote vulnerability and poverty and impeding effective exchange process, market integration on equal terms)	<ul style="list-style-type: none"> • Resources vulnerable to rapid degradation, unsuited to intensification, use of costly inputs; low carrying capacity • Limited, low productivity, high risk production options; little surplus generation or reinvestment and subsistence orientation preventing high cost-high productivity options, disregard by 'mainstream' societies • High overhead cost of resource use, infrastructural development; leading to permanent under-investment or selective investment for exploiting niche for mainstream economy • People's low resource capacity preventing use of costly options for resource upgrading and production • Socio-political-marginality of communities and their disregard by 'mainstream' societies
c) Imperatives (i.e., appropriate responses, adaptation approaches to reduce constraining impacts of (b))	<ul style="list-style-type: none"> • Upgrading resources (e.g., by terracing) and regulation of usage • Focus on low intensity, high stability in resource use • Diversification involving a mix of high and low intensity uses of land, a mix of production and conservation measures with low cost • Local regeneration of resources, recycling, regulated use, dependence on nature's regenerative processes and collective regulatory measures/institutions • Different norms for investment to take care of high overhead costs • Special focus on more vulnerable areas and people and their demarginalisation/empowerment
Diversity & Niche	
a) Product of high potential, heterogeneous resources	<ul style="list-style-type: none"> • Interactions between different factors ranging from elevation and altitude to soils and climatic conditions, as well as biological and human adaptations to them, uniqueness of environmental resources and human responses
b) Manifestations and implications (i.e. potential for exchange systems with high comparative advantage, reducing poverty etc.)	<ul style="list-style-type: none"> • A basis for spatially and temporally diversified and interlinked activities conducive to sustainability, strong location specificity of production and consumption activities limiting the scope for large-scale operation; focus on demand rationing, supply not on expansion • Potential for products, services, activities with comparative advantages
c) Imperatives (i.e., appropriate responses, adaptation approaches to harness potential through exchange process, and promote poverty-reducing activities)	<ul style="list-style-type: none"> • Small-scale, interlinked, diversified production/consumption activities differentiated temporally and spatially for fuller use of environment • Need diversified and decentralized interventions to match diversity • Equitable external market links; infrastructural development and local capacity building to guide the mountain development interventions and harness the opportunities

Source: Table adapted from Jodha (1997) and based on evidence and inferences from over 60 studies referred to by Jodha and Shrestha (1994)

Table 2: The Indicative Factors/Conditions Potentially Ensuring Gainful Exchange Option and their Status in Mountain Areas

(A) Mountain features constraining or favouring conditions required for gains from effective exchange systems	(B) Indicative conditions/processes promoted by and conducive to gains from exchange					
	Relating to production processes			Relating to post production processes		
	High producti- vity involving resource use intensification, high input availability and absorption capacity	Specialis- ation and economies of scale	Trad- able surplus generati on	Infrastruc- ture facilities, access to markets	Equitable effective external links	Human capacities quick response to changes
Limited Accessibility: distance, semi-closedness, high cost of mobility and operational logistics, low dependability of external support, or supplies	(-)	(-)	(-)	(-)	(-)	(-)
Fragility: vulnerability to degradation with intensity of use, limited low productivity/ pay-offs options	(-) ^a	(-)	(-)	(-)	(-)	(-)
Marginality: limited, low pay-off options; resource scarcities and uncertainties, cut off from the 'mainstream', social vulnerability	(-)	(-)	(-)	(-)	(-)	(-)
Diversity: high location specificity, potential for temporally and spatially inter-linked diversified products/activities	(+) ^a	(-)	(+)	(-)	(-)	(-)
Niche: potential for numerous, unique products/activities requiring capacities to harness them	(+)	(+)	(+)	(-)	(-)	(-)
Human adaptation mechanisms: traditional resource management practices-folk agronomy, diversification, recycling, demand rationing, etc.	(-)	(-)		(-)	(-)	(-)

Source: Table adapted from Jodha (1997)

Note: a (-) and (+) respectively indicate "extremely limited" and "relatively higher" degrees of convergence between imperatives of mountain features and the conditions associated with potential gains from exchange systems. The situation may differ between more accessible (commercialised) and poorly accessible areas. Besides, the socio-economic vulnerabilities may further affect the above degrees of convergence. To enhance the exchange opportunities as adaptations options against trade impediments, the degree of convergence between (A) and (B) indicated by (+) has to be increased. This would involve (i) enhanced accessibility, (ii) upgrading and development of fragile/marginal lands or evolve high pay off activities suited to them; (iii) demarginalisation and empowerment of mountain communities; (iv) harnessing of niche and high pay off diversified activities with equitable local gains and (v) build upon indigenous knowledge combined with R&D based scientific measures to evolve resource management/usage systems with high returns. All this needs greater understanding of mountain situation, and act accordingly.

Exchange-Obstructing Role of Mountain Specificities

Due to fragility and marginality the resource use intensity that facilitates enhanced productivity and surplus generation for exchange is obstructed. The consequent low productivity, higher poverty, low buying capacity and socio-economic marginality manifested in many ways, further restrict the capacity for high investment needed for harnessing high pay off niche and diversity. Fragility further restricts the scope for reducing inaccessibility (through infrastructural building) which is essential for mobility, market links and effective exchange.

Inaccessibility on its own restricts exchange processes by imposing isolation, impeding mobility and causing high cost of secondary sector activities. Inaccessibility makes harnessing of mountain opportunities costly and uncompetitive, and unattractive for the external agencies. Its final consequence is limited, unequal and exploitative external links, causing absence of a crucial prerequisite for effective exchange process.

To sum up diversity of resources, products and services and specific niche are potentially the most important features of mountains to strengthen their exchange and economic links with others. But fragility, inaccessibility and marginality, individually or jointly impede the whole process of equitable market integration and fair system of exchange. Consequently, the opportunities are harnessed on small scale with limited exchange systems, particularly in the relatively more accessible areas. Intra-mountain disparities (e.g. between more accessible and poorly accessible areas) is one consequence of this. Furthermore, wherever such harnessing involving non-mountain external agencies is possible, the pattern is characterized by over-extraction of niche and unequal highland – lowland economic links (*Jodha 2001*).

Human Adaptations: Evolution of Exchange Systems

However, despite all the constraints and limitations, exchange systems involving mountain resources and products have gradually evolved in mountain regions. Ranging from barter systems to trade involving money has characterized several mountain regions. As in several other regions (Platteu 1991), in mountain areas this has been a result of human adaptation mechanisms to manage constraints and opportunities created by natural circumstances in mountain areas. Human adaptations to mountain conditions are by themselves quite unique in terms of helping mountain communities to survive and grow under high risk, low productivity environments. Self provisioning systems involving limited, small scale exchange, in keeping with the limitations imposed by mountain specificities, reflect the general situation in most of the mountain areas. Besides, several trading hubs in better accessible areas, have developed, where more modern exchange system/links can be seen. This manifests the dynamic aspect of human adaptations, where gradual change involving the increasing role of exchange systems have characterised mountain areas and communities.

The human adaptations seen as steps in evolving socio-economic and related complements to the ecological niche of mountain areas, could be put under broadly two phases of promotion of exchange links and associated processes. Based on their primary driving circumstances; approaches to manage or by pass the imperatives of mountain specificities and the resultant outcomes, they could be described as:

- (i) Traditional, primarily nature-driven production and exchange systems, conditioned by relative isolation and semi-closed high risk situation of mountain areas, dominated by self provisioning systems supplemented by barter and petty trading.

- (ii) A phase of exchange process induced by administrative (political) and economic (market) integration of mountain areas with mainstream plain economies, where market and state complemented each other in promoting exchange processes involving enhanced trade links and level of monetization of activities (Nathan and Jodha 2002).

The focus, broad features and consequences of (i) and (ii) are presented in the following, quite self explanatory Table 3.

Table 3: Indicative Picture of Adaptations to Mountain Conditions seen through the Lens of Exchange-Processes in Mountain Areas during Different Phases^{a)}

Situation under Traditional Primarily Nature-Driven Phase	Situation under Economic and Administration Integration Phase
<p>A. <u>Basic objective circumstances</u></p> <p>(i) Limited accessibility, isolation and semi-closedness; poor mobility and external link; greater dependence on local resource, largely subsistence oriented production systems.</p> <p>(ii) Autonomy, local control of local resources with little external impositions low population and limited local and external demand pressure.</p>	<p>(i) Increased physical, administrative and market integration of traditionally isolated areas with mainstream systems, reducing exclusive dependence on local resources; mix of market and subsistence orientation.</p> <p>(ii) External linkage-based diversification of sources of sustenance; local autonomy and traditional practices marginalized due to administrative, fiscal impositions</p>
<p>B. <u>Key driving circumstances generated by (A)</u></p> <p>Locally evolved defences against bio-physical and socio-economic vulnerabilities; collective stake in protection/regeneration of local resource, through two way adaptation to mountain specificities with focus on demand rationing.</p>	<p>Integration linkage and unequal exchange relations, enhanced role of externally designed, imposed interventions, insensitivity to fragility, marginality; external demand-focused resource extraction; priority to supply enhancement over demand management, increased resource flows from mountains, unequal highland – lowland economic links.</p>
<p>C. <u>Consequences</u></p> <p>Diversified, conservation focused resource use; priority to demand rationing in place of supply enhancement through over extraction, petty trade, periodic migration; money involving exchange in better accessible areas and "market towns" in mountain areas.</p>	<p>Emergence of dual sector (traditional and market driven) systems; marginalization of traditional systems; mountain serving the mainstream economy with high social and environmental costs, prominence of market and public interventions without mountain perspective, emerging indicators of unsustainability.</p>

a) Based on inferences and evidence from various studies in HK-H region synthesized by Jodha (1996, 1998)

It is not proposed to elaborate on them except indicating their approach towards mountain specificities and how they were managed (Jodha 1996, 1998). The traditional system emphasized a "two way adaptation to mountain specificities" i.e. adapting resource use and demand pressure to the limitation of resource base and amending (as far as possible) the resources (e.g. terracing on fragile slopes), to meet the increasing human needs. The role of formal exchange systems was rather limited (except in better accessible areas).

The situation under "integration led phase" has been quite different. "Integration" on equal and fair terms does help in enhanced well being and progress of the involved parties, but in the case of mountains the initial gaps (caused by marginality, inaccessibility, fragility etc.) promoted unequal links between mountain communities and external agencies, as reflected through patterns of unequal highland lowland economic links (Jodha 2001). Consequently, despite several gains of integration, due to the increased role of external agencies and marginalization of traditional approaches and practices, the whole focus of mountain resource use systems got shifted to supply enhancement rather than (internal and external) demand management.

Consequently, the niche resources in particular, faced over extraction and depletion. The mountain communities had to face increased external economic dependency (Bjonness 1983). These "integration-linked" elements can also help in understanding the repercussion of globalization process for mountain areas and communities. This is so because the exchange systems and associated integration processes promoted under economic globalization in a way represent up-scaling and deepening of "integration" and are likely to further strengthen the market focused and market driven patterns that emerged with the gradual integration of mountain areas with mainstream economic systems. In fact the pace and patterns of integration or its formal/informal terms and conditions, would largely determine the risks and opportunities globalization process might create for the mountain areas and communities.

The Globalisation and Mountain Context

During the earlier discussion, Table 2, sketched the broad circumstances of mountain areas that any exchange and trade focused intervention including globalization process has to negotiate. Its effectiveness as an equitable system will be largely conditioned by the exchange impeding mountain specificities such as inaccessibility, marginality, fragility. Ignoring them would mean more risks and negative repercussion for the mountain areas and communities. Their appropriate management on the other hand could generate several gainful opportunities for the mountains.

To make the discussion operationally relevant, it will be helpful to contextualize the potential consequences of globalization with reference to some operational issues observed in the changing situation in mountain areas. Some of the important contexts in this regard may include:

- (i) Visible incompatibilities between the driving forces and operational mechanisms of globalization and the imperatives of mountain specificities;
- (ii) Complementarities between integration-led prevailing patterns of selective resource (niche) extraction and the ones promoted by globalization, particularly through top-down external impositions with little sensitivity to mountain specificities;
- (iii) Links between forces and processes promoting economic globalization and global environmental change (e.g. profitability and uncontrolled demand-driven over-extraction of mountain resources and emerging unsustainability indicators);
- (iv) Impact on prevailing (community-led) resource management and livelihood options, following their marginalization and disregard due to changed (pro-market) policies;
- (v) Scattered, small scale initiatives (through NGO etc.) helping community participation in globalization led initiatives e.g. new enterprises and market led partnerships;
- (vi) Emerging cases of relaxation of mountain constraints (e.g. inaccessibility, marginality etc.) using financial and technical support from agencies promoting globalization;
- (vii) Possibilities of "localized formulations of globalization process"; "identification of links between global flows and local spaces" etc.;
- (viii) Policy-programmes to facilitate gainful/equitable integration of mountain economies in to wider economic systems.

The choice of the above and other related contexts, was the basis of a short-term exploratory study on Globalisation and Fragile Mountains conducted by ICIMOD with McArthur Foundation support during 2001-2002. The purpose was to assess the people's awareness and responses to various elements of globalisation percolating to micro – masro levels through various changes in state policies and programmes including economic liberalization and reduced welfare programmes as dictated by market forces, affecting the activities and practices at lower levels in the selected areas of HK-H countries (Jodha 2002a). The study involved field visits, group discussion as well as interactions with the specialized agencies including concerned government departments, private sector agencies and academics and practitioners concerned with globalization issues at field levels. The important understanding generated by the exploratory study is summarized under Table 4, and briefly discussed below. The evidence and insights underlying the following discussion were synthesized from the documents and presentations from different HK-H countries listed under Annexure A.

In keeping with the above operational contexts the major apprehensions about potential negative impacts/risks from globalisation process stem from the following factors observed, narrated, assessed and analysed at different levels during the implementation of exploratory research project.

- (i) Visible incompatibilities between (a) the imperatives of mountain's bio-physical conditions (inaccessibility, fragility, marginality etc.) shaping the resource use systems/production patterns and people's livelihood strategies on the one hand and (b) the norms and practices (e.g. resource use intensification, profit-driven selectivity and over-extraction etc.) encouraged by globalisation. In other words, the primacy of bio-physical conditions determining the nature and complex of economic activities in mountain areas and the unprecedented primacy accorded to market forces that promote specific patterns and levels of economic activities tend to generate conflicting scenarios with high risk potential.

Globalisation brings new incentives, technologies, financial support systems for selected market wise profitable products and services, which in turn are isolated (and promoted) from inter-linked diversified mountain production systems, leading to disintegration of interlinked diversified sustainable combination of economic activities. Example: specific focus on timber or dairy products leading to disintegration of prevailing farming-forestry-livestock linkages in mountain areas, and selected cash crops picked up from economically and ecologically beneficial integrated cropping systems in parts of HK-H are just two examples.

Due to OGL (open general license) for import/export puts mountain niche products in direct competition with external goods. The latter having better man-made support (funds and technologies) displace the mountain products from consumer markets. Fruits, flowers, off-season vegetables are some of the examples.

- (ii) Due to market's known tendency to ignore negative externalities created by primacy of interlinked biophysical conditions in mountain areas, there are greater chances of accentuation of existing patterns of over-extraction of mountains' selected niche resources/opportunities (and ignoring their side effects), following the reduced regulations and liberalization policies. This may accentuate the existing pattern of high land - low land economic links unfavourable to mountain areas.

Table 4: Potential Vulnerability and Risk Enhancing Factors Associated with Globalisation in Mountain Context and Approaches to Adapt to them^{a)}

Potential Sources	Elaborations/Examples
(a) Visible incompatibilities between: (i) driving forces of globalisation and (ii) imperatives of specific features of mountain areas (fragility, diversity, etc.)	(i) Market driven selectivity, resource use intensification and over exploitation induced by uncontrolled external demand versus (ii) fragility-marginality induced balancing of intensive and extensive resource uses; diversification of production systems, niche harnessing in response to diversity of resources Consequence: Environmental resource degradation; loss of local resource centred, diversified livelihood security options; increased external dependence.
(b) Accentuation of negative side effects of past development interventions under globalisation due to their common elements (approaches, priorities, etc.) with adverse effects on mountain areas	Common elements between the past public interventions and market driven globalisation: (i) Externally conceived, top-down, generalised initiatives (priorities, programmes, investment norms) with little concern for local circumstances and perspectives, and involvement of local communities (ii) Indiscriminate intensification at the cost of diversification of resource use, production systems and livelihood patterns causing resource degradation (e.g., deforestation, land slides, decline in soil fertility, biodiversity) (iii) General indifference to fragile areas/people excepting the high potential pockets creating a dual economy/society; over-extraction of niche opportunities (timber, mineral, hydropower, tourism) in response to external (mainstream economy) needs, with very limited local development Consequence: Environmental degradation and marginalisation of local resource use systems, practices, and knowledge etc., likely to be enhanced due to insensitivity of market to these changes and gradually weakened public sector
(c) Globalisation promoting erosion of provisions and practices imparting protection and resilience to marginal areas/ people (including disinvestment in welfare activities)	(i) Traditional adaptation strategies based on diversification, local resource regeneration, collective sharing, recycling, etc., likely to be discarded by new market-driven incentives and approaches to production, resource management activities (ii) Shrinkage of public sector and welfare activities (including subsidies against environmental handicaps, etc.) depriving areas/people from investment and support facilities (except where externally exploitable niche opportunities exist) Consequence: Likely further marginalisation of the bulk of the mountain areas and people.
(d) Loss of local resource access and niche-opportunities through the emerging "exclusion process"	Niche resources/products/services with their comparative advantage (e.g., timber, hydropower, herbs, off-season vegetables, horticulture, minerals, tourism etc.) and their likely loss under globalisation through: i) Market-driven over extraction/depletion due to uncontrolled external demand ii) Focus on selective niche, discarding diversity of niche, their traditional usage systems, regenerative practices; indigenous knowledge iii) Transfer of "niche" to mainstream prime areas through market-driven incentives, green house technologies, infrastructure and facilities (e.g., honey, mushrooms, flowers produced cheaper and more in green house complexes in the Punjab plains compared to naturally better suited Himachal Pradesh, India) iv) Acquisition and control of access to physical resources: forest, waterflows, biodiversity parks, tourist attractions by private firms through sale or auction by government, depriving local's access, destroying customary rights and damaging livelihood security systems. Consequence: Loss of comparative advantages to fragile areas or access to such gains for local communities
(e) Adapting to globalisation process, possible approaches to loss minimisation	i) sharing gains of globalisation through partnership in primary and value adding activities promoted through market; building of technical and organisational capacities using NGOs and other agencies including market agencies to promote the above ii) promotion of local ancillary units (run by locals) to feed into final transactions promoted by globalisation; this needs institutional and technical infrastructure and capacity building iii) provision for proper valuation of mountain areas resources and compensation for their protection, management by local people for use by external agencies iv) enhance sensitivity of market-driven initiatives to environment and local concern to be enforced by international community and national governments v) All the above steps need local social mobilisation, knowledge generation and advocacy movements; and policy-framework and support Consequence: If above steps are followed, there are chances of influencing the globalisation process and reducing its negative repercussion for mountain areas/people

Source: Table adapted from Jodha (2002b, 2005)

- (iii) There are visible indicators of loss of measures imparting protection and resilience to mountain communities, against livelihood risks and vulnerabilities following the marginalisation/erosion of age old adaptation measures. As already seen and reported from the market-access wise progressive areas of HK-H countries, the traditional adaptation strategies characterized by diversified and flexible resource use, resource and product recycling, provisions of common property resources and various collective risk sharing arrangements are on the decline due to new market driven processes, new short term, profit oriented production choices and practices.
- Similarly, the role of public sector is rapidly shrinking, structural adjustment programmes are imposing different norms and rules on potential dependents on welfare and public support systems as reported from Himachal Pradesh and Uttaranchal (India) and parts of Nepal. To sum up the weakening of traditional self-help measure and present day welfare programmes, the break down of social security net is a major risk created by globalisation specially for the poor.
- (iv) Erosion of mountains' niche opportunities/products (e.g. horticulture, off-season vegetables, specific herbs etc.) through the decline of their mainly nature endowed comparative advantages, following the promotion of man-made arrangements (through market agencies) in plains is another emerging risk. Focus on more efficient production of traditional mountain products in plains; and initiation of liberal trade policies exposing mountain products to competition without alerting and preparing them for the same are other features of the change.
- Which would erode the traditional niche based comparative advantage of mountains. Thus unless mountain products are improved and upgraded, through scientific innovations, the former would lose the nature endowed comparative advantage. To this one should add the promotion of secondary sector activities (e.g. value adding chains) to mountain niche products to enhance their gains in the globalization era.
- Viewed from positive angle the facilities and initiatives that helped building competitive products from plains can also be used for enhancing comparative advantages of nature-supported mountain products specially the organic products. This has already been initiated in floriculture in Kunming area of China; several herbal crops by domestication in part of Nepal, Bhutan and India through public-private collaboration involving farmers' participation. They need up-scaling.
- (v) Visible "exclusion" process is another risk. In here communities face alienation from their resources due to acquisition of the latter by private firms and others (now permitted and encouraged by the state); and rapid decline of: traditional rights to resources, disregard of practices, products, provisions, services etc. which helped sustain mountain communities. These sources of risk are seen in many areas including India, China, Pakistan and Nepal.
- Besides, mountain communities are largely left out of the change process of positive changes (promoted by globalisation), due to their lack of requisite capabilities, skills and investment resources. To elaborate, mountain people are being excluded from the globalization process (or global economy) through inability to participate in and gain from opportunities offered by the global change. The petty niche harnessed by them is losing in competition from the big firms. The latter have their new links with community leaders as well as local government officials to help them. Many of the farmers are converting in to contract farmers with unequal terms of transactions.
- Production and trade-related exclusion mechanisms are further accentuated by resource-centred exclusion. Examples of change in ownership and access to land resources have been reported from different parts of HK-H including Himachal Pradesh and Uttaranchal (India), greater Kathmandu valley and Pokhara valley (Nepal), Swat area of Pakistan part of Tibet autonomous region, Hunan and West Sichuan in China. In

many cases community resources (or even privately owned lands) are transferred to corporate sector in the name of development or special economic zones (SEZ) etc.

To the above, the following may be added. In many parts of HK-H people's access to their traditionally owned or used natural resources is blocked. This is done through declaring such resources as protected areas and wildlife parks etc. under the pressure of national and international environmental groups. Cases of private firms/government agencies acquiring ownership of such facilities also exist.

On the top of all this, the environmental services provided by resource-conservation practices of the people are seldom recognized and compensated (Jodha 2001).

However, of late pressure and initiatives are shaping to involve communities in such conservation initiatives and gain there from.

- (vi) Finally, due to several common drivers of economic globalisation and global environmental change, such as push for high profitability, focus on selectivity, narrow specialisation etc. leading to reduced diversification and resource regeneration and enhanced resource use intensification, the above risks are likely to be further accentuated, leading to reduced extent and quality of local resource based earning options for mountain communities.

Reduced extent of crop diversification and intensification certain commercial crops including non-food crops, was reported from Kunming area China, Himachal Pradesh, India and parts of Nepal.

By way of concluding the discussion on risks from globalization, some broad steps to adjust to or reduce the risks may be listed. This is done through Table 5 in a very simple manner. The identified steps would directly or indirectly constitute part of the discussion on potential opportunities globalization may offer to mountain areas and communities.

Table 5: Indicative Broad Steps to Enhance Adaptation Options Against Risks Associated with Globalisation Processes

A. Mechanisms to help mountain people share gains of Globalization	<ul style="list-style-type: none"> • Share in primary and value adding activities based on mountain-located opportunities promoted by globalisation • Partnership with external market agencies • Equitable terms of trade (under highland – lowland economic links)
B. Strengthening local participation in harnessing of mountain niche	<ul style="list-style-type: none"> • Complement nature-endowed niche with human made niche facilities • Ancillary role in harnessing of key resources (e.g. hydropower, NTFPs etc.) by external agencies
C. Arresting Exclusion process	<ul style="list-style-type: none"> • Partnership in enterprises based on assets taken from local people (e.g. in eco-tourism; SEZ projects) • Adequate compensation for unavoidable exclusion (i.e. loss of asset, opportunities due to global process)
D. Integration of mountain economies with rest of the world on equal terms	<ul style="list-style-type: none"> • Capacity building for it • Partnership with external agencies
E. Global advocacy and concessions	<ul style="list-style-type: none"> • With special problems of mountains, provision for special window (exceptions to WTO rules) to help mountain areas • International concern and mobilization/dialogue supporting mountains for their contributions to global commons (fresh water, bio-diversity, hydropower helping downstream communities and economies)

Potential Opportunities

Notwithstanding the above negative prospects, globalisation is not necessarily a source of gloom and doom. It also creates potential for new opportunities for mountain areas, where the latter can have comparative or exclusive advantage. Even when the globalisation induced changes carry both risks and opportunities for mountain areas/ communities, due largely to the factors such as: the lack of both sufficient information and concrete visibility of positive opportunities, absence of facilities and capacities to materialise the potential opportunities, and the past experience of market led or public sector led change in mountain areas generating several negative side effects etc., the discourse on the subject is generally dominated by the perspectives that project risk aspect more than the opportunity aspect. Hence, any effort highlighting the potential opportunities created by globalisation carries the risk of being interpreted as a piece of loud thinking. With this caution, we may summarise the findings and insights generated by the exploratory research. However, this should be noted that the realisation of most of these potential opportunities requires capacity enhancement of mountain economies/communities and conscious effort on the part of external agencies to link mountain economies as equal partners in the change process.

- (i) The first and foremost category of potential opportunities relates to the specific mountain products and services (such as medicinal herbs, flowers, other organic products, mountain tourism etc.) with global demand, in which these areas may have comparative or exclusive advantage.
- (ii) The increased information, awareness and capacities of mountain communities generated through their enhanced links and partnership with the external agencies is another important source of opportunities. This can help in making mountain innovations products/services more efficient and competitive in the global market.
- (iii) The possible complementing of the mountain area's nature-endowed niche by human made (niche promoting) facilities, through support from more resourceful global agencies, once they get attracted by the untapped or poorly tapped potential of mountain areas, is yet another potential opportunity.
- (iv) Quite related to the above is the possibility of relaxation of the biophysically determined constraints (poor access, isolation, fragile slopes, as well as marginality of mountain areas and communities), with the enhanced links with global agencies/processes having sufficient technological and financial resources, once they are induced to harness/develop mountain resources for their global (and by implications local) gains. Examples of private sector's entry into infrastructural development and support services have already emerged in different mountain areas.
- (v) What has been stated above also applies to managing the risks emanating from different mountain specificities. Accordingly, the globalisation led initiatives can address incompatibilities between imperatives of mountain specificities (fragility etc.) and the implications of driving forces and operational mechanisms of globalisation. For instance the globalised (more resourceful) system would have new technologies and means for: promoting high value products with low intensity land use for fragile areas; road construction techniques with little damage to fragile slopes; promotion of marginal areas through increased investment and appropriate technologies; human capacity enhancement in marginal communities with institutional and financial support (as it is already initiated in some areas); evolving high pay off resource diversification approaches using new technological and management systems; enhancing mountain niche; upgrading traditional technologies etc. These are some of the potential possibilities to help mountains through resourceful external market agencies.

Realisation of Potential Opportunities

However, the realisation of the above mentioned potential opportunities assumes, more pro-active and positive role of private sector (in association with NGOs, governments and communities) to help sustainable development of mountain areas. Notwithstanding the doubts on such perspectives from different quarters, this may be not an unconceivable possibility for the following reasons.

- (i) First, global profitability and competitiveness of any private firm, dealing in mountain products, resources services etc., based solely on resource extraction, can not be sustained for long. Hence, in order to maintain their edge in the global market, such firms would be induced or compelled to focus on resource regeneration and support the processes leading to this.
- (ii) Secondly, in view of the mountains being a major source of many global public goods (different environmental services, unique biodiversity, fresh water, hydro-power, herbal products and unique indigenous knowledge systems, eco-tourism etc.), the pressure is likely to build on the agencies benefiting from mountain areas, to invest in mountains and simultaneously address the concerns for high productivity and resource conservation in mountain areas. Global attention to such issues is already increasing through various activities and Fora such as mountain agenda during Rio Earth Summit 1992, the International Year of Mountains (2002), promotion of mountain partnership following WSSD (2002). Of late in the context of climate change and associated problems, mountains are accorded a central place in understanding and addressing the issues. However, this should be admitted that the promotion of social responsibilities of private business sector, implied by the above formulation, may not be an easy task. However, by using certain special provisions of WTO regulations, such possibilities can be enforced.
- (iii) Finally, under the current pattern of unequal highland – lowland economic links, most of the resource/product/service flows from mountain areas to the downstream economies are free or poorly compensated. Once "market" becomes key driving force behind economic links, the mountain resources or rather environmental services provided by them would have to be realistically priced. The agencies using such services would be made to pay for the negative externalities of their activities. This may result in to enhanced resource conservation and increased financial flows to mountain areas for development and welfare activities.
- (iv) To promote and harness the above mentioned potential opportunities, the enhancement of local capacities and increased advocacy of mountain concerns at global fora are essential steps. These tasks are already on the advocacy agenda of above mentioned initiatives (e.g. mountain partnership etc.). The possibilities indicated above should form the part of mountain economies' adaptation strategies in the context of economic globalisation and global environmental change.

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