

(RE)SEARCHING MARGINAL FARMS IN MOUNTAIN AREAS: SOME CONCEPTUAL ISSUES¹

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Introduction: Preview of Issues

This paper is focussed on some conceptual aspects of field research directed to identification of marginal farms and their problems in mountain areas. Hence, without going into the finer definitions of the term 'marginality' (being covered by other presentations in the workshop) we confine our discussion largely to the approaches to identification of marginal farms to facilitate target area and group focussed interventions to help them.

Marginality is a context specific phenomenon not only in terms of lowest position of marginal entity vis-à-vis the mainstream situation, but also in terms the contexts or indicators (e.g. endowments or income streams etc.) with reference to which 'marginal status' of a group etc. is assessed. Since most of the above contexts or indicators overlap, their combined consequence can be treated as common indicator of marginality. According to this paper, this consequence, in turn, could be reflected through the range and quality of production, consumption; exchange options available to households/communities. In the mountain areas, the circumstances created by features such as degree of inaccessibility, fragility, diversity, niche opportunities and human adaptations to the above conditions, determine the available range and quality of potential options. Understanding of the latter (i.e. options profile and its mapping) can help in separating marginal from less marginal or non-marginal farm households. The following discussion by way of elaborating on mountain specificities and their option restricting/enhancing implications; indicative prioritisation of circumstances created by inaccessibility, fragility etc. in restricting the range and quality of production/exchange options (see Table 1, 2 and Figure 1) indicates a possible approach to identify more marginal areas, communities and households in mountain areas.

Context Specificity of Marginality

Irrespective of its finer conceptual descriptions term 'marginal' refers to an entity, which is inferior to the overall average situation and counts the least in the mainstream context. In the context of farm households, the inferior situation i.e. marginality is primarily manifested in terms of levels of resource endowment, range and quality of production/consumption option etc. In operational and policy context, marginality is used as a window to look into the poverty-status of the households, groups, an area etc. (TAC 1996).

Depending on the purpose there may be several ways to look at the marginal status of farm households such as, quantity and quality of land, and other resources (assets)

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owned; range and quality of production options; income and levels; incidence of scarcity and "seasonal hunger period"; degree of dependence on others; surplus generation and reinvestment capacities etc. However, this may be noted that at times some one marginal in one context may not be so in other context. Thus marginality is a context specific phenomenon. However, more often, due to its common or inter-linked causes, marginality manifested by situations in different contexts may overlap. Thus characterisation of farmers with reference to different contexts may give a more comprehensive picture of marginal farmers. The de-marginalisation options too would need to be evolved with reference to the contexts used for identification of marginal entities. However, assessment of marginal farmers using the multiple, inter-related criteria indicated above is an extremely information intensive exercise. Hence, for purpose of pre-survey identification and selection of marginal farms for field investigations, it is rather impossible to use them in the absence of secondary information on multiple aspects. Thus the assessment of marginality with reference to different contexts is a post-investigation phenomenon; (i.e. it can be assessed after data on different aspects are collected). Accordingly, the 'marginality' as a criterion for selection of households of communities for detailed research on the issues and options for marginal farmers has to be assessed with reference to relatively limited number of criteria for which data from secondary sources are available.

The relevant household level data from the secondary sources are usually available from land revenue records, agricultural and general census reports, and specific sample surveys. Some of the important items generally covered by such records include size of land holding, animal holding, family size, dominant occupation of the household etc. In most cases, characterisation and identification of marginal farms based on the aforementioned broad information proves consistent with the assessment of marginality based on the analysis of post-investigation detailed data on multiple aspects. However, to ensure greater degree of the said consistency, it is necessary that pre-investigation criteria used for identification of marginal farms are more realistic and reflect the objective circumstances perceived through secondary data or field observations. An understanding of the biophysical circumstances affecting the farm household (which determine the range of constraints and opportunities for the farmers) is one more appropriate approach to help pre-survey identification of marginal farms/communities. In the case of mountain farm households, mountain specificities (e.g. fragility, inaccessibility, diversity etc.) provide a useful framework to assess marginality of areas, communities and households as elaborated later.

Option Profiles: Range and Quality of Options

Another problem in identification/assessment of marginality of farm holds (both in pre- and post field investigation stages) using the multiple and inter-related contexts is the differences in their relative roles in making the farm households marginal. Bringing all indicators or contexts of marginality on a single denominator may not be very easy. However, one approach to handle the problems of multiple contexts is to think in terms of their combined consequence reflected through "option profile" i.e. range and quality of production (as well as exchange and consumptions) options commanded by the concerned households or groups. In this context also, the framework based on mountain specificities can be helpful. Accordingly, one looks at the imperatives of

mountain conditions such as fragility, inaccessibility etc., which determine the objective circumstances hindering or helping the people's access to production, consumption and exchange opportunities.

In this context it may be stated that the historical experience of the process of agricultural development/ transformation, indicates the broad circumstances and factors associated with economic advancement by regions, countries, communities and farmers. The presence or absence of these circumstances (to be indicated soon) can be used as broad indicators of availability/non-availability of range and quality of options. On the basis of mountain specificities i.e. their imperatives and implications, one can easily indicate the groups, which could be treated as marginal (or more marginal) in comparison to others. To elaborate on the above, first it may be stated that the farmers/communities, who are deprived of circumstances facilitating: productive resource availability, resource use (including input absorption) intensity, infrastructural support/logistics, economies of scale; generation and trading of surplus, learning and usage of technologies/experiences from other areas, and access to crucial support from policy makers, are likely to have marginal status compared to others who are less or little affected by the above constraints. Some of the mountain specific conditions, specially fragility and inaccessibility, tend to promote the aforementioned constraints, and thereby contribute towards the marginality of mountain households. This is illustrated by Table 1.

According to the broad constraints, suggested by Table 1, mountain conditions, unless properly understood and managed, are not conducive for enhanced range and quality of production and related options for the farmer. This makes most of the mountain areas marginal vis-à-vis prime land agricultural regions. However, this may be noted that since diversity is a dominant feature of mountain areas, the above constraints on production options are not uniformly present at every location. Accordingly, neither all mountain areas are equally fragile or inaccessible nor they are equally marginal. Hence, with the changing degree of above mentioned constraints, the range and quality of options to the farmers change and with this would change their degree of marginality.

At this stage this may also be reiterated that since a marginal entity is one which counts last or does not count at all, in terms of attention of the mainstream policy makers, it receives limited focus of the general development interventions directed to the over all population. Thus by implication, marginal entities are likely to be intentionally or otherwise 'excluded' from the processes designed to help different communities, farming areas and groups. This exclusion process operating in different context, also means reduced range and quality of man made options available to marginal groups. In the mountain context this possibility is indicated by mountain problems' invisibility to the mainstream policy makers and the latter's indifference to the former (Table 1, last column). This adds another dimension to possible 'option' mapping for the marginal farms to identify their problems and prospects with special reference to external approach to their problems. A focus on this aspect can help in identifying the areas requiring attention and reorientation of programmes for marginal farmers.

Table 1: Mountain specificities and the circumstances influencing production options for farmers

The circumstances conducive to enhanced range of options							
Mountain specificities generated constraints/opportunities for enhanced options	Option enhancement through						
	Resource use intensity	Input absorption capacity	Infras-structure	Scale economies	Surplus generation/trade	Replicating external experiences (tech)	Policy-program me support
Limited accessibility: distance, semi-closedness, high cost of mobility and operational logistics, low dependability of external support, or supplies	(-) ^a	(-)	(-)	(-)	(-)	(-)	(-)
Fragility (and marginality): vulnerable to degradation with intensity of use, limited low productivity/pay-off opportunities, resource scarcities and uncertainties cut off from the 'mainstream'	(-)	(-)	(-)		(-)	(-)	(-)
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: adapted from Jodha (1990)

^a(-) and (+) respectively indicate extremely limited and relatively increased degree of convergence between imperatives of mountain specificities and the conditions associated with enhanced range of production options for agriculture. The constraints indicated for the primary production sector also applied to the secondary and tertiary sector activities, such as product processing and marketing.

Mountain Specificities and Marginality

Marginality, represented by limited range and quality of options, characterising the households or communities, in the first place, is a product of unfavourable bio-physical endowment of the farm households. This may be a factor separating one community from others or one group (or individual households) from others in the same locality. Their status as a marginal or non-marginal (or less marginal) farm household will be broadly determined by their relative position vis-à-vis the bio-physical circumstances reflected through degree and linkages of different mountain specificities. For example a community or a group or an individual household having more fragile land, less accessible and less linked locations, more risky and less productive agro-climatic conditions etc. are likely to be marginal in terms of availability of limited number of potential production options and their quality.

At the second level, where bio-physical conditions are amended or adapted through man made efforts (e.g. resource up gradation by terracing or irrigation; improved communication links and logistics for development and harnessing of diverse niche opportunities), the marginal/non-marginal communities and households can be separated on the basis of the extent and availability of the man made endowments to them. The above reasoning highlight the need and relevance of area based approach to identification of marginal households and the required interventions to demarginalise them. To operationalise this approach, one should clearly understand the imperatives and implications of mountain specificities. They are summarised in Table 2. Their role in restricting the range of options was already indicated by Table 1. However, since all areas/location in the mountain regions are not uniformly characterised by the indicated mountain specificities and manmade endowments, the identified location, community or households have to be screened through a process of successive steps differentiating them in terms of higher or lower incidence of circumstances generated by individual mountain specificities and human adaptations steps against them.

According the successive steps in assessing the marginality (or potential options possibilities) situation in mountain areas are indicated by the following Figure 1, which puts the message of Tables 1 and 2 in a different way. A more precise application of this simple approach, can help in locating marginal and non-marginal or more marginal and less marginal areas/households in mountain areas.

The Figure 1, for purpose of illustration considers only two situations (i.e. higher and lower degrees of individual mountain conditions (specificities) and respectively treat them as indicators of greater range of potential options (GRP) and limited range of potential options (LRP). The situation represented by the latter is in turn treated as indicator of potentially more marginal status (MM). The MM situation (or marginal group), in one context e.g. accessibility context, has been further differentiated with reference to next context or another constraining factor e.g. fragility of land resources available to the marginal group. Accordingly, we have GRP and LRP (and MM) groups at the second level. Through the fragility based differentiation can be applicable to GRP group at first level i.e. accessibility context, but Figure 1 does not indicate this. The process of differentiation of GRP and LRP (MM), is repeated at the third, fourth and fifth levels respectively representing contexts of diversity of resources, niche opportunities

and man made endowments, influencing the availability and access to potential options to the farm households and communities. Using this process or its modified version, one can reach a situation where most marginal groups are identified. However, unless required it is not necessary to go through all the five steps or levels to identify the marginal or more marginal farm households. The process can be focussed at any of the indicated stages/steps and separate marginal and non-marginal households/groups in the specific context i.e. the objective circumstances created by inaccessibility or fragility etc.

Finally, a word on the hierarchy of contexts (i.e. circumstances affecting the range of potential options manifesting the degree of marginality) indicated by Figure 1. To begin with we treat the degree of accessibility as a key factor influencing the range of potential options (through internal and external links) available to households and communities, and thus make them less or more marginal. Second, potential opportunities facilitated by accessibility may be constrained by fragility restricting intensification of land resource base. Third, situation could be still worse, if fragility is not accompanied by sufficient diversity of resources, which can help enhance potential options through diversified interlinked activities. Fourth, if diversity include some niche opportunities/resources to provide comparative advantage to the otherwise more marginal households/communities. Their absence can make the already marginal groups more marginal. Finally, if a group due to above circumstances is found to have limited options, its situation can be improved with man made factors e.g. public support and adaptation mechanisms against limited option situation. The absence of man made factors can make them still more marginal.

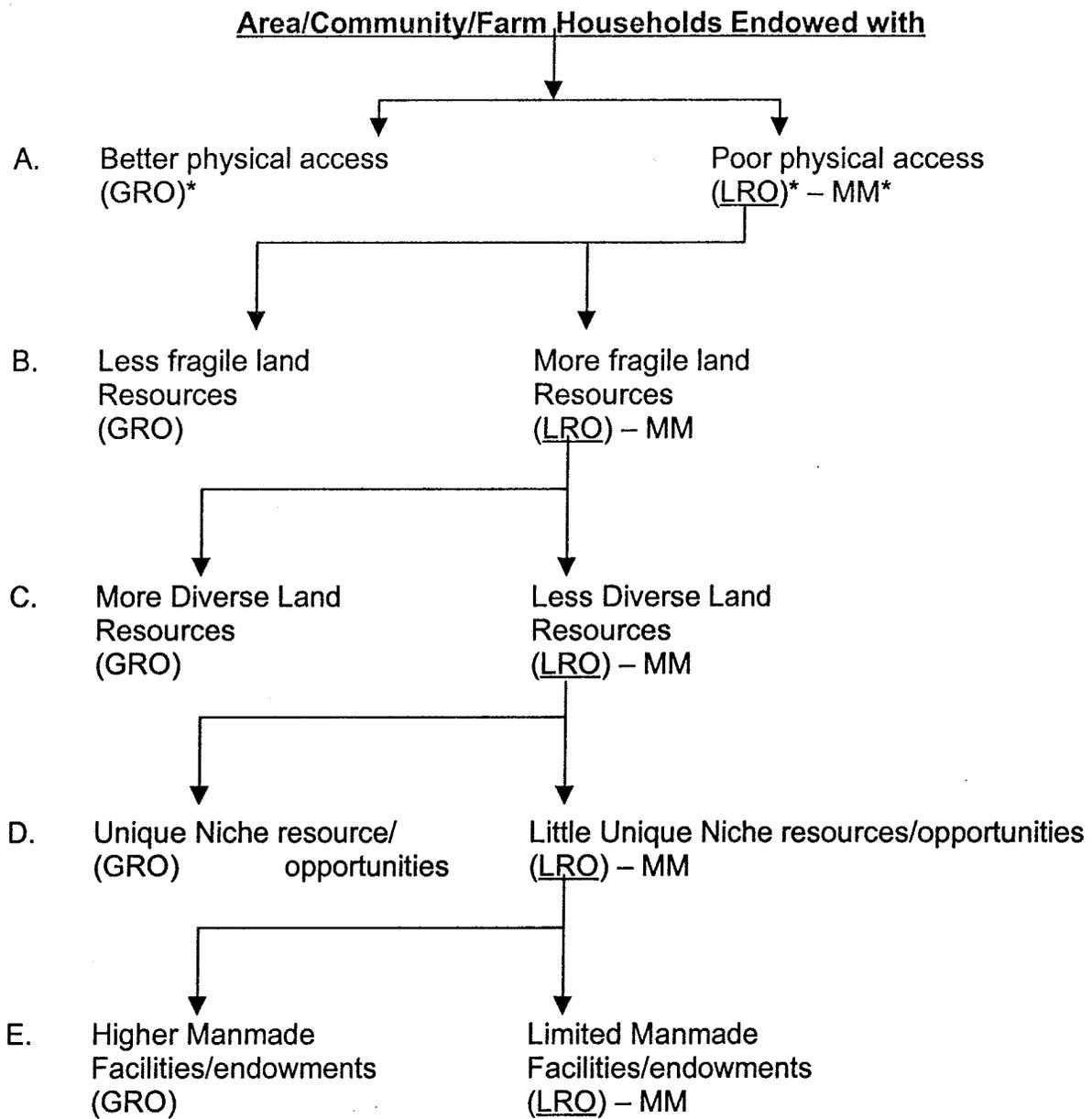
The figure also suggests the focal activities to be emphasised to demarginalise the groups and households in different contexts. This can also help in prioritising the circumstances or contexts contributing to marginality of farm households. Accordingly, the de-marginalising interventions will need to be diversified and site specific.

Table 2: Mountain Conditions Contributing to the Marginality of Farmers in Mountain Areas^{a)}

Mountain conditions	Implication in term of Circumstances/consequences which contributing to marginality of farm households in mountains
1. Fragility: (caused by slope, altitude, geology, climate, vegetation etc.)	<ul style="list-style-type: none"> • Limited, low pay off, risky production options • Inability to intensify resource use afford and intensively use high productivity inputs • Subsistence oriented largely bio-mass centred systems • Unsuitability of technologies developed from prime lands and non-availability of modern technologies designed for fragile areas • Negative impacts (e.g. resource degradation due to subsidised use of inappropriate technologies) • High cost of resource upgrading/maintaining • Inability to produce and reinvest surplus from subsistence production
2. Inaccessibility (caused by slope, altitude, terrain conditions, seasonal hazards etc., and poor infrastructure)	<ul style="list-style-type: none"> • Limited access and dependability of external support (products, input, resources) • Local resource centred production/consumption systems • High cost of mobility, logistics, infrastructure to support agricultural transformation • Limited scope for learning and replicating external experiences • Marketing constraints and inability to trade at favourable terms of trade • Unfavourable high land – low land economic links • Inability to profitably harness the advantages of diversity and niche opportunities • Making problems of mountains invisible to mainstream policy makers
3. Diversity and niche (resulting from different bio-physical and other factors)	<ul style="list-style-type: none"> • Inability to have advantage of scale due to strong site-specificities of land based activities • Presence of 'dual' systems/areas transformed-less transformed ones • Inability to harness niche - opportunities due to the lack of resources, skills, technologies, infrastructure and market constraints • Ethnic/social diversities; traditional systems – reducing visibility and collective voice of the mountain people
4. Combined impacts of (1) to (3)	<ul style="list-style-type: none"> • Bio-physical constraints lead to socio-economic constraints making mountain farm households/mountain communities marginal • Distort 'mainstream policy makers' perceptions/perspectives relating to mountain areas/communities • Focus on mountain agricultural development without mountain perspective • Invisibility of problems – prospects of marginal farm development

a) table adapted from Jodha (1997). See sketch 1 also.

Figure 1: Successively declining potential range of options associated with varying mountain conditions indicating changing degree of marginality of households and communities



* Note: GRO – Greater range of potential options
 LRO – Limited range of potential options
 MM – More marginal than others.

See Tables 1 and 2 also.

References

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