# Vernacular Languages and Cultures in Rural Development: Theoretical Discourse and Some Examples

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## Abstract

The role of language and culture in rural development projects is investigated. Examples taken from the context of Northern Iran, the significance of which is not confined to its agricultural and forestry resources and extends beyond national borders, are presented. A starting point of the analysis is an appreciation of diversity, not only in the biological, but also in the cultural sense, as an asset and viewing development endeavors as sense making acts. It is further argued that new intangible forms of capital are increasingly gaining in importance in the contemporary world. Capital is considered not merely as an asset, but as a relation having accumulation moment as well, and impact on the regeneration of cultural and economic divides. A central concern is enhancing social inclusion and promoting conditions for making voices of otherness heard. It is deemed that vernacular voices encompass valuable indigenous knowledge and modes of perception, the negligence of which can undermine the success of rural development projects.

Keywords: language, culture, social inclusion, rural development, Iran

## 1 Framework

The role of language in development, despite its obvious relevance, even centrality considering its species- specific place and its role in communication process, has so far remained a neglected area and largely escaped scientific investigation and theorization (BEARTH, 2000). Among the studies that have constituted an exception to this rule and have considered language as a primary topic in development research, many have been carried out from a dominant- centric position. A major problematic in those studies has been the language as a problem in itself: how to deal with the question of linguistic diversity and lack of competence in a major language that can serve as the means for common discourse and social interaction. A World Bank publication (CHISWICK *et al.*, 1996) devoted to the economics of language exemplifies this approach. One of the consequences of linguistic heterogeneity, according to the analysis presented in that

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study, is a reduction in communication among segments of the population. This is the equivalent of an increase in transaction costs or the costs of exchange. It presents a mathematical model of an economy and demonstrates that linguistic divisions in the population retard economic development and exacerbate other often vexing problems, namely, inequality, poverty and inequity in the society. Further analysis demonstrates how microdata on individuals and households can be used to study issues related to the determinants and labor market consequences of dominant language fluency. The obvious conclusion is that majority language education is not only economically necessary, but also socially desirable. It is desirable especially from the minority point of view, because it is they who suffer from linguistic disadvantage. The study introduces the concept of language capital; but only as a subset of human capital satisfying the triple requirements of being embodied in the person, costly to create, and productive. The viewpoint elaborated in the mentioned study shows the stances common to several other studies. Not only are the recent sociolinguistic works discussing the advantages of multilingualism and linguistic diversity not taken into account, but the newer trends in development research appreciating diversity are also not considered. The latter trends can be seen, for example, in recent UNESCO studies e.g. the Universal Declaration on Cultural Diversity, adopted by the UNESCO General Conference (2001). Explicit in the declaration is that cultural diversity is as important a factor for development as biological diversity. In terms of intangible and oral heritage, it has been argued, the world is experiencing the rapid disappearance of local languages and of traditional cultures and their underlying spirituality, and of knowledge traded over generations, which is profoundly relevant for sustainability.

Exoglossic language and educational policies inherited from the colonial era have contributed to perpetuating a conceptualization where access to innovative knowledge and hence to social and economic development and to full participation in processes of democratization and decision-making, is considered linked to proficiency, if not in English or some colonial language, at least in a nationally or regionally dominant language. That there is a one- way communication of innovative ideas from the developed states and institutions to the underdeveloped or developing countries, regions, and nations, which still carry the "burden of traditionalism", is a common supposition reinforced by the correlation of innovation and development with modernization and industrialization, which are ultimately identified with westernization and the fact that funding flows from the former to the latter. Even critical studies of rural development otherwise trying to adopt minority- centric points of view and consider the role of indigenous languages in development communication, often start from the presupposition of a development source language, DSL, as opposed to a development target language, DTL. Outright majoritycentric stances are, of course, becoming discredited. Much emphasis is now put on notions of participatory and endogenous development projects. That target community should assume control over its development and orient the development plan around local resources has become an important goal not only for progressive non- governmental organizations, NGO's, formed to promote that idea, but also for donor institutions as well. The two main motivations cited are enhanced sustainability and better use of indigenous knowledge (BEARTH and FAN, 2003). However, important as the emphasis on local control may be in many respects, it is claimed that it does not go far enough, and endogenous control of rural development does not vet guarantee a break from dominantcentrism. In fact, whether the target economy is completely market- based, or if it still has remnants of traditionalism, relations of dominance are often no less pronounced; and neither is the tendency to innovate and experience helping identify the best development path necessarily stronger. Good intentions and promising approaches may also fail to lead to better implementations due to inadvertent methodological defects. It has been pointed out that in many pluridisciplinary and practical research works where sociological approaches to economic and linguistic problems are adopted, little attention is paid to philosophical and methodological issues, and by default, the sociological analysis is conducted within the theoretical confines of the dominant paradigms. Functionalist biases are inevitable results (NERCISSIANS, 1988b, 2002). In particular, uncritical consideration of target communities as total entities and lack of regard for the heterogeneity and internal conflicts and contradictions are important drawbacks. Another shortcoming to be avoided is the notion of overadapted agencies and the consequent social determinism. A new concept of glocal development has found currency in the contemporary integrated world. Both exogenous and endogenous factors are important for rural development and it is their interaction that leads to the selection of the proper route. Our stances are that we should go beyond target community control of the development process and study conditions under which social inclusion is enhanced and those voices that were kept silent can now be heard in development communication. Even beyond that, it is not enough to hold that increased participation, not only by the target community as a whole, but also by its different strata, is an important condition for successful and sustainable rural development. Social inclusion, it should be emphasized, is not a precondition but an end for rural development projects. It is also important to overcome the forces hindering development. The iron grip of dependency cannot be broken unless raised vernacular voices other than those sustaining it are heeded.

It has been posited as a starting point for consideration of language as the missing link in development studies, that it is not the mere comprehension of, and collective action response to the idea of development, presumably emanating from some exogenous source, by the target community, that should constitute the objective of development communication. The more important question is its internalization and endogenous reproducibility through negotiation and argumentation processes. In other words, it is conjectured that communicative sustainability is a prerequisite to sustainability in development. Again, this paper purports to go beyond that premise. Of course, it is important to penetrate communal discourses on development issues, something that is impossible unless the idea is expressed in a language that is understood by them, even if it were true that their vernacular, and the very fact of linguistic heterogeneity, had a detrimental impact upon the development project. But the latter supposition, even if it could be considered true in the past, can no longer be supported by the facts in the contemporary world. We should take several steps beyond the stance/current status, stressing the importance of expressing the development message in the target language even though it could be costly. Firstly, heterogeneity and diversity can be an asset rather than liability. Furthermore, social creativity can enhance the value of diversity. In sociolinguistic studies, the concept of additive multilingualism has been elaborated for examining the conditions under which maximum benefit can be obtained from societal plurilingualism (NERCISSIANS, 1988a, 2002, 2004). Secondly, even if it had no advantage, vernacular development, through being an objective of the endeavor, should be pursued. And finally, vernacular expression of the development project, and not its mere translation, is essential for overcoming the real obstacles hindering it.

What has been said about language is also true for culture (HANNERZ, 1992). Closely related to languages and cultures are mental structures, ideologies, norms and values, customs and behavioral patterns, and identities. Their correspondence, however, need not always be one to one (NERCISSIANS, 2002; NERCISSIANS and LUCAS, 2005). Our approach to development stems from the belief that it is closely related to the process of sense making. Our sense of self is always correlative to our sense of an external, constraining reality. Biological organisms are both an embodiment and a source of meaning: communities of fate becoming communities of will that are discursively constituted and oriented towards freedom, transcending the intrinsic drives of the organic life towards a future shaped by an ideal. A main concern is how ideal types or standards are formed. The concept of multiglossia refers to the existence of several different standards, differentially endowed with social prestige. Each standard is considered proper in a certain domain. A two dimensional approach to the scientific conceptualization of diglossia suggests that the standards are compared along different axes. The prestige or status dimension gives rise to an overt standard that is formed from above, while the solidarity or identity dimension also leads to a covert standard formed from below. The first standard is proper in domains that are more formal, and therefore does not include the intimate and family domains, and is thus superposed, that is, obtained through a process of formal education. It has also been argued that the ability to compartmentalize the domains, and freely switch between different standards is an index of social dominance. Others find themselves in a situation where there are contradictory expectations always co-present. They have to carry out an act of balancing. Thus they always underachieve because if they pursue one ideal too far they fall too far behind alongside the other ideal axis. This extended model can be as easily applied to the spheres of cultures, social norms, and identities (NERCISSIANS, 1988a, 1992, 2000, 2001, 2004).

The rest of the paper is organized as follows. The concept of language capital, cultural capital, and other symbolic and intangible capitals and their role in rural development projects is analyzed in the next section. Examples illustrating the role of vernacular languages and cultures are provided afterwards. Concluding remarks constitute the final section of the paper.

## 2 New Capitals

Rapid technological progress especially during the past decade and the advent of disruptive technologies like infotech and biotech has led to radical shifts in social and economic paradigms. An important aspect of the shift is the ascent to hegemonic position of a new economic sector. The sector, which at least in some respects includes quite traditional spheres of economic activities, but in contemporary world can be called the (newly recognized) sector of intangibles, incorporates most of the economic activities used to denote as service sector, as well as newer activities producing knowledge and other goods related to culture and consciousness. This new sector is growing very rapidly, employs a large part of the workforce, is generally more productive, and exerts its influence upon the older sectors: agriculture and industry. Computer networks and economic activities in virtual space are reinforcing the trend towards the information- based digital economy. Success in the new economy no longer depends only on workforce and machinery. In the new economy knowledge and the ability to mobilize and coordinate efforts and find best ways of dealing with physical and environmental constraints are more important factors for increasing productivity (LUCAS and NERCISSIANS, 1987, 2003).

Social and economic changes in the contemporary world are associated with changes in anthropological and cognitive- behavioral spheres. A major expression of those transformations is the increased importance attached to representation and signification. In a rapidly changing world where flexibility and adaptability are crucial, functions and meanings are not considered fixed and total any more. Everything becomes a subject for re-use, re-deployment, re-interpretation, and re-signification through denotation as well as connotation. Cultural items, through becoming commodities, become economic categories. But use values are no longer primary aspects of economic commodities. Rather, goods and articles are consumed mainly because of their semiotic attributes. Their use marks consumers' identities. This fusion of culture and economy intensifies the sense making process. Development plans become first and foremost endeavors to endow community life with new meanings. Language is the most important tool for this process of semiosis. To carry out the development plan, the community must first accept it as its major discourse.

The construct of a learning organization (SENGE, 1990) has been proposed as a suitable tool for the conceptualization of rural development projects. Success in development, it has been argued, will depend on organizational competencies and developmental potential of the rural community. Drawing upon past and ongoing theorizations on organizational development and learning, SENGE (1990) has elaborated five core disciplines for building a learning organization. The first, personal mastery, refers to individual community members' learning. Organizations learn, in part, through the synergy of the learning processes of individuals constituting them. ARGYRIS (1993) holds that many people and organizations practice defensive reasoning, i.e., act so as to avoid embarrassment or threat. But to avoid embarrassment and threat, they also avoid learning. Effective learning, therefore, becomes possible when the flaws in mental models are discovered and corrected. Team learning constitutes the third core discipline. It begins with dialogue and builds up the capacity of individual members to suspend assumptions and think together genuinely. Next comes shared vision. The latter can be built by finding good compromises between individual visions and developing those visions in a common direction. The fifth discipline is denoted as system thinking. It most of all refers to the primacy of the whole. A learning organization is thus an entity which individuals "would truly like to work within and which can thrive in a world of increasing interdependency and change" (SENGE, 1990).

The concepts of knowledge capital and social capital have in recent times been widely used both in theoretical works and in practical feasibility analysis for development projects (COLEMAN, 1988; DASGUPTA and SERAGELDIN, 2000; PUTNAM, 2000; BUCK-MAN, 2004). Closely related are the concepts of symbolic capital, language capital, and cultural capital (BOURDIEU, 1986). These constructs are somewhat more suitable for our purposes because the term capital does not carry the implied functionalistic connotation of being free of conflicts. The concept of knowledge capital draws upon theories on intellectual capital and knowledge management. With the advent of the digital economy and the leading role of the economic sector of intangibles, there can be no doubt about the importance of leveraging knowledge for creating value. Knowledge here is viewed as a resource and capital refers to the value creating process. Intellectual capital theory, according to this view, discusses intellectual endowments as the stock or content of knowledge, while knowledge management theory is about the flow of that resource. Unlike the activity- based view of an enterprise, which focuses on particular tasks people carry out in the course of doing their work, the knowledge- based view elaborates the functioning of a more responsive, learning, and intelligent enterprise in a more rapidly changing world. A knowledge-based organization is thus closely related to a learning organization (DIBELLA and NEVIS, 1998; FREMEREY, 2000, 2005). Both are models of intelligent organization in a sense more general and holistic than the sum total of intelligences of the people forming it. The main method for creating knowledge capital is said to be through conversation. These are structured interactions during which the leaders, practitioners. and stakeholders reflect upon their experiences, share understandings, and explore the different dimensions of knowledge creation.

The construct of social capital also refers to the potential of leveraging one's social support for material gain. Poor and disadvantaged communities, both in urban and rural settings, often have rich and close knit social networks, upon whose solidarity and assistance they can count to confront poverty, hardship, and crisis, and which could be utilized to reduce vulnerabilities, resolve disputes, share knowledge, etc. Social capital is, therefore, a main asset for rural communities that lack other assets available to more affluent entities. Social capital thus refers to the civic virtue embedded in a sense network of reciprocal relations; it consists of the trust, mutual understanding and shared norms, values and behaviors that binds members of the community together and make cooperative action possible. The conjecture proposed in this paper is that even social capital does not always mean homogeneity and total harmony. Diversity can also be an enriching aspect in many cases that can be leveraged for more effective development. But it does involve understanding, tolerance, and trust: that which motivates people to commit themselves to goals and courses of action. The lack of it may not only lead to frictions and inefficiencies that hinder development, but also to wars, massacres and genocides that modern history of rural developments has, unfortunately, registered so very often. When ethnicities are suppressed, expelled, or exterminated, then the knowledge capital embodied in their cultures, languages, and customs are lost as well.

In many cases, ethnicities constitute the organizing principle for division of labor, and ethnic conflicts disrupt human resource utilization processes for decades to come. There are many examples from different times and places, including those from conflict areas surrounding Iran. The successive massacres and genocides of Armenians, Kurds, and other ethnicities, in eastern Anatolia, for example, has left that area undeveloped despite favorable conditions, and is leading to larger scale, intra- state conflicts on utilization of water resources. The Hutu-Tutsi conflicts in sub-Saharan Africa leading to the recent genocide in Rwanda provides yet another example (UVIN, 1998; PONS-VIGNON and SOLIGNAC LECOMTE, 2004). Degradation of lands and forests, destruction of wetlands and frequent flooding, loss of habitat for wildlife and sedimentation, and economic collapse has been the result of massive suppressions, resettlements and massacres. Indonesia provides ample examples how hegemonic and centralized rule undermines and finally destroys locally grown modes of rural production and natural resources management which have proved to be appropriate and sustainable (SUNITO, 2003). Conflicts are also instigated by colonialist and imperialist interests, and these can be circumvented only by attitudes of tolerance and comradeship arising from conflict-long history of living together and strong consciousness of community of interests.

We propose to distinguish between bonding capital and bridging capital. The former refers to inter- group ties like kinship and language. The latter refers to strategies promoting social inclusion. Bridging social capital refers to propensities to transcend various social divides. A third construct, linking capital, has also been elaborated to account for non- equal divides. Linking social capital refers to reaching out across power and class divides. The constructs of knowledge capital and social capital have found very wide acceptance among not only radical theoreticians but also international donor organizations. Various means for their operationalization and quantitative assessment have also been proposed. On the other hand, their contradictory conceptualizations and functionalist biases have also been widely criticized. Bourdieu's conceptualization of social capital, however, includes a critique of functionalism. It expounds the problem of struggle for dominance as well as the dialectic between the objective and subjective. But even there, capital is understood mostly as a resource. Bourdieu distinguishes economic, social, symbolic, and cultural capitals. The latter forms are capitals since they are interchangeable with and transformable into economic capital. Central to his theory is the concept of habitus (BOURDIEU, 1986). It refers to the system of acquired dispositions that are both categories of perception and organizing principles of action. It functions as a regulating element in reproduction and reconstruction of social relations and status within social space through making ideologies, and senses of social dynamism appear self evident, masking their representational essence. Structures of dominance are not maintained through complete functional fits or challenged due to lack of a complete fit. Break in prevailing order, rather, can happen through removal of veils of misrecognition. Legitimacy is conferred to social structure in the form of symbolic capital. The social world presents itself as a symbolic system organized through the logic of difference. Consumption of certain products and occupation of certain places, for example, signify differences that construct social positions. It is indeed through signs and signals that sense making is negotiated and meanings are constructed. Thus class appropriation of symbols, like class appropriation of material means of production, can lead to social divisions and reproduction of power relations. Consciousness is not mere reflection of objective conditions, even allowing for miscognition due to distortions caused by social interest. Production of meaning, rather, is like production of material goods. Through symbolic capital, it is possible to engage in reconstruction of the social space within the plurality of its possible structurings. Culture and education are the central factors in ordering the social space and affirming class differences. The educational system reproduces cultural division of the society. Cultural capital refers to collection of forces that influence social status. Through acquiring cultural competence, one can obtain social distinction. Finally language, through being the most important semiotic system, and the most direct and species- specific means of communication, is in the center of attention in this paper. Like the other forms of new capitals, it can be leveraged and is an important factor in reproduction of social relations. This raises the question of social commitment: Do we try to reaffirm our status and power? Or shouldn't we feel challenged to take a meta-position, which means to resort to a language which serves as a link rather than a divide between different groups and strata?

Before elaborating examples on the role of language in rural development, let us briefly point out three important aspects. Firstly, language constitutes a holistic mode of conceptualization as demonstrated by different interpretations of the Sapir-Whorf hypothesis (NERCISSIANS, 2000). Secondly, language embodies local knowledge. The latter concept has been the focus of much attention in recent research on rural development. It advocates the inclusion of local voices and priorities, and promises empowerment through participation in the process – though it rarely escaped the dominant-centrism bias. Thirdly and most importantly, language constitutes access key to the corresponding imagined community. Furthermore, research on the interface of languages can reveal the extent of communicative reciprocity.

It was argued that capital should be differentiated from asset or factor of production. Viewed as a process rather than an entity, it incorporates the accumulation moment. With accumulation come social stratification, exploitation, and dominance. New capitals are no exceptions. Their role in reproduction of existing social divides as well as creation of new divides is as important as their potential for being leveraged for achieving better models of rural development.

#### 3 Examples

To illustrate the topics discussed in the previous sections, let us consider rural development projects in north Iran. The importance of that region stems from several considerations (UNIDO, 1998; SHAKOORI, 2001; PLUSQUELLEC, 2002; I.R. IRAN, 2001, Gilan Regional Committee on Irrigation & Drainage). Firstly, it includes the southern coast of the Caspian Lake. The geopolitical importance of the Caspian is far greater in scale than regional or even continental. It is the largest inland water body in the world. Despite its long distance from the open waters, it has many characteristics for which it is designated as the Caspian Sea. It accounts for more than 40 percent of the overall volume of the world's lacustrine waters. Its moderating role for the harsh climate of Western Asia cannot be overestimated. The Caspian region includes steppe land in the north, cold, continental deserts and semi-deserts in the northeast and east, and warmer mountain and highland systems in the south and southwest. It supports very rich biodiversity. Over 400 species are unique to the Caspian. Its native sturgeon accounts for approximately 90% of the world's caviar industry. Secondly, Northern Iran is important for its environmental conditions and economic situation. The striking contrast between the extremely favorable climate in the coastal area in the northern parts of the country. and the mostly desert central and southern parts is obvious to every visitor. The geological depression of the Caspian Lake is a result of the rise of the Alborz Mountains in the Cenozoic. With an approximate area of 60,000 square kilometers, the thinly stretched coastal areas between Alborz Mountain range and Caspian Lake occupy 3.7 percent of the country. In 1986, the Guilan and Mazandaran counties constituting that area had a population of about 5.5 million, or 11 percent of the country's total population. The diverse topography endows the region with a beautiful natural landscape. Its forests are the only ones in the country that have been commercially explored/exploited. It holds 40 percent of Iran's pastures and 8.5 percent of agricultural lands. Rural development in the coastal region is particularly important in Iran. The area is the main source of growing rice and tea for the country, the most important attraction point for internal as well as international tourism, historically the center of Iran's fishing industry, as well as many other rural activities, some also unique to that area. Another very important factor is the existence of dense forests, unique in the country and especially important for the very high level of air pollution that has become a major problem in recent times. On the other side of the Alborz, the climate changes abruptly. However, the rivers flowing from the mountains still furnish favorable conditions. Historically, the area has always been important for the trade routes that connect Asia to the West, and for the large cities that have served as the capital of the country in different times. Tehran, the capital of contemporary Iran, is situated in the southwest of Damavand, the highest peak in the country; and has been attracting migrant populations from every side of the country. But the eastern half, which was economically very active before the Mongolian conquests, has remained underdeveloped and under-populated; leading to the danger of desertification. The rapid development in the rest of the region under consideration during the past few decades, on the other hand, have inflicted severe damage to the already very fragile and vulnerable environment; and will continue to inflict even more disastrous damages, unless a carefully studied change of development course is attempted. We shall especially focus on the more favorable environmental conditions of the southwestern coast of the Caspian, although the danger in continuation of the extensive trends in the development projects is more or less the same in the whole region under consideration

The dangers posed by continuation of the present course of development are indeed great (FARVAR and MILTON, 1972; MESSER, 2001; CAMBERS, 1998; PLUSQUELLEC, 2002; KASHANI, 2003). With the region's geographical diversity and abundance of natural resources, unique patterns of population settlement and spheres of business activity

have resulted. Its vast economic possibilities have served as a magnet for people and the area has become quite congested with a density of 90 persons per square kilometers, three times the national average. The absence of town planning and the exploitation of any available property to accommodate settlers, the invasion of the natural plateau, and congestion generated inadequacy and disruption in the activities of towns constitute some of the main problems in those areas. A case in point is the development of tourist facilities. Townships and private villas were hastily built along the coast between Ramsar and Babolsar in order to accommodate more tourists. This development scenario exposes the sensitive natural environment to misuse, misappropriation and damage, and also creates insufficiencies and disruptions in the region. Statistics show that forest areas which have been converted into farm lands and orchards have increased ten-fold compared to 60 years ago and the decline in jungle coverage definitely has environmental repercussions. Compared to figures in 1963, the total forest area has been cut down to half, and each year, about fifty thousand hectares more are ruined.

The geographical territory of the region is characterized by a delicate balance between marine, aquatic, and terrestrial ecosystems. The growth of populations and cities with the inevitable increase of traffic, agriculture and industries is one of the culprits of desertification in the Caspian Lake. Another hazard is soil erosion. This deterioration of fertile soil results from overgrazing by sheep, cows and horses in farms and households and from the fact that forests are cut down. Frequent sea water flooding, poor irrigation practices and high rates of water evaporation leads to salination. Both land and water animals and plants are adversely affected. Entire breeds are destroyed or replaced. Migrating birds lose valuable habitat and are forced to find alternative places to feed and breed. A build up of salts in soil, eventually to toxic levels for plants, is the process of salination of groundwater. Salination increases risks to human health because there are few alternative drinking water sources. Damage to coastal habitat alters land use patterns, especially in cases of recreational activity. It reduces the aesthetic and economic value of the land. In Iran, the rapid urbanization and industrialization of coastal areas has not been followed by adequate construction of sanitary and solid waste infrastructure. The resulting deficiencies are most clearly noticeable in relation to water pollution in coastal areas, especially rivers that pass through populated and industrial areas. The most conspicuous example of this phenomenon is the Zariab River that enters Anzali lagoon and carries the pollution load of numerous factories and towns into this water body.

The main vulnerabilities identified in a study conducted by the Caspian Environment Programme, were categorized in the following aspects. Fishstock, including sturgeon is declining drastically. The coastal landscapes and habitats are damaged by a variety of natural and man-made factors. Natural factors include water level fluctuations (on both storm and decadal scales), earthquakes, and climate change. Some of the man-made causes of the degradation of coastal landscapes and damage to coastal habitats are: deforestation, regulation of rivers, urbanization/ industrial development, inadequate agricultural/ aquaculture development, inadequate recreational development, and land-based and sea-based pollution. Caspian species biodiversity across nearly all phyla is low

compared to that of other more open seas. Decline in environmental guality includes the decline in air, water and sediment quality, damage to ecosystems due to human activities, loss of aesthetic appeal, and related issues. UNDP, EU, World Bank, WHO, and other health data sources in the region show high levels of infant mortality, relatively short life spans compared to developed countries, and incidence of certain types of diseases in certain areas. Water level fluctuation is a major threat to coastal infrastructure. Wind-induced or storm-induced surges cause considerable flooding or exposure of coastal areas. Lack of planning at all levels has led to construction practices that ignore water level fluctuations. Desertification may push urbanization closer to the water, further increasing pressure on coastal infrastructure. Significant portions of the coasts are located in seismic zones of magnitude ranging from 6 to 7. Earthquakes may cause hazards due to the strong tectonic activity in the middle and southern sections of the region. Introduction of exotic species is a recurring phenomenon in the Caspian Lake, as much of the ecosystem arises from flora and fauna transported from other bodies of water. More recently, man has introduced foreign species both purposely and accidentally. Certain mollusks have been introduced into the North Caspian Lake in the past, for instance, in response to changes in river hydrological regimes. Plant species have been introduced to coastal wetlands in Iran. Some of these species have unexpectedly caused anoxia in lagoons as a result of decreasing light penetration. A main threat is the contamination caused by offshore oil and gas activities. Besides extraction, downstream activities such as oil refining, transport, and related industries also increase the environmental pressures in the sea, in the sediments, and in air.

Rural development projects, during the past decades, have been planned and executed with the support of a number of Iranian and international organizations. Some of the official institutions as well as non-governmental organizations, NGO's, are very progressive in their outlook. Jahad is an example of a governmental body, though initially set up after the Iranian revolution as a semi- official organization composed of volunteer workers who wanted to further revolutionary goals by helping the rural population (KASHANI, 2003). The Center for Sustainable Development, CENESTA, on the other hand, is a non-governmental, non-profit organisation dedicated to promoting sustainable community- and culture-based development. CENESTA works with a variety of partners, from local communities in Iran and other countries to local and national governmental agencies, from universities and research organizations to national and international NGOs. The UN bodies with which CENESTA and its experts entertain on-going collaboration include UNDP, FAO, UNICEF, UNSO, IFAD, UNCCD and the UN Secretariat. CENESTA is the first non-governmental Organization born in Iran just after the Iranian Revolution in 1979. Before the Revolution, it was next to impossible to register a notfor-profit Organization in Iran even though the law gave the citizens the right to do so. Any one who dared think of something not-for-profit was suspect. A group of citizens getting together dedicated to a social aim? That was considered outright dangerous! CENESTA was thus born out of the concern of a group of activist scientists and citizens who were concerned that development in Iran as well as other parts of the Third World needed its own patterns and models that should not be based on imitation of the West. Indeed this would have been anathema to the state operating on the fundamental precept that development was Westernization itself. Both organizations have been involved in rural development projects in the region under consideration in this paper. Among supporters and partners are well known international donor bodies like the World Bank, FAO, and UN; various ministries and governmental bodies from Iran and other countries; and, especially in the case of CENESTA, other international progressive NGO's with an indigenous and participatory approach to development with special emphasis on local knowledge and biodiversity.

"Integrated Participatory Production and Pest Management" is the designation of a rural development project being carried out in North Iran by CENESTA in collaboration with UNDP and GEF. This project addresses the rice crop production and pest management in fourth northern provinces. At present rice yield is estimated at 4000 kg/hectare and potential yield can achieve 5000 kg/hectare under the Integrated Participatory Production and Pest management (IPPPM) approach. The overall objective of the project has been to improve food production strategies through greater farmers' participation in problems identification, planning, implementation and monitoring to ensure sustainable farming system using Farmer Field School (FFS) as major tool. It can be seen by examining the proposal as well as progress reports of the project that the whole effort is directed towards increasing the productivity of the crops and combating pests through educating a limited number of farmers in the course of fieldwork, with the help of community animators and government extensions, and a larger number of secondary farmers' adopters directly exposed. The larger economic and environmental issues like the reason why productivity is not high to begin with and whether increasing the production of rice or other specific crops is desirable at all remains outside the scope of the project. It can be argued, for example, that replacing wheat by rice as the main diet in Iran is perhaps not so wise; and market liberalization through allowing the export of more expensive Iranian rice and import of cheaper foreign rice may be a more effective way of motivating farmers to increase their productivity and achieving higher levels of self sufficiency at the same time. These and similar other issues are left to be taken into consideration implicitly through the absorption of local knowledge of the farmers via the "learning by doing" method adopted in the project. It is here that the problems of language and culture, and the more general question of new capitals come into the picture. In the 1<sup>st</sup> IPPPM Workshop where CENESTA experts and Jahad staff were participating, the facilitators and participants narrated their initial hesitation to participate in classes they did not consider relevant, their motivation to continue to participate in order not to miss the opportunity to become experts, and their enthusiasm for the project realizing its respect of the farmers and the real possibility of gaining control over the project instead of following government directives and advices. It becomes at once clear that language and cultural capitals, paving the way for being the chosen participants and facilitators, can be leveraged for gaining social control. Some speakers actually expressed their main motivation as gaining that social control rather than achieving the project goals.

In order to illustrate some of the other issues associated with the role of language and culture in rural development, let us consider the Taleshi and Tati ethnicities, which are, in fact, the aboriginal people speaking dialects once spoken in the north, but are now confined to few villages (SAMADZADE, 2002; CHIZARI et al., 1999; MOHSENI, 2002; RAMAZANI, 2002; WIJAYARATNA, 2004). In fact, the very name of the once widely spoken language and the corresponding ethnicity, Tat, marks otherness; since it has been derived from the Turkish stem meaning one whose identity is other. The choice of these ethnicities does not mean that similar analysis cannot be carried out in the very multiethnic context of northern Iran. In fact, it is to be noted that ethnic diversity is a characteristic of the northern part of the country. There are many different languages spoken in that area, both aboriginal and newer ones formed as a result of migrations especially from Central Asia that have become native languages, and the corresponding ethnicities have been forged as a result of assimilation of aboriginals into the migrant population. During the course of the history, the influence of invading cultures and dynasties has reached northern areas with more difficulty and time lag and has been successful only through assimilating the locals. Whether or not those languages are structurally close to Farsi, the dominant language in Iran, they are all considered vernacular and the prestige associated with any particular language reflects mainly the dominance pattern of the corresponding ethnicity in local or regional sense. However, the more aboriginal languages enjoy stronger support for ethnolinguistic vitality from the solidarity dimension. The less dominant a language is, the more its speakers are excluded from the development communication. In the case of Taleshis, they are still concentrated in towns and villages in the very thin coastal area between Talesh Mountain range and the Caspian Lake. Their local influence has vanished especially after the constitutional revolution and modernization of Iran.

Taleshi identity is threatened not only by the dominance as well as direct migration of Farsi speakers, but also, and even more so, by Guilaks from the southeast and Azerbeijanis from the northeast. Both of these ethnic groups have been very active in the constitutional movement and modernization of the country. In fact, their sociocultural participation is resented by the less active Farsi speaking majority, and they are negatively stereotyped especially through cruel ethnic jokes. The economic influence of the Taleshis, as well as their nomadic culture and way of life, has taken a severe blow especially following the curtailment of the political influence of their khans. There have been massive immigrations into their homeland too. Those Taleshis that live in lowlands have learned rice growing from the Guilaks and are now predominantly farmers. Animal husbandry is, however, the main occupation of the Taleshis of the mountains. Taties, on the other hand, are more scattered than Taleshis. Their villages are in the vicinity of towns and villages of other ethnic and national groups in a larger area. Unlike Taleshis, they are less hesitant to engage in trade and generally to urbanize. It can be seen that the division of labor is an important aspect of ethnocultural maintenance.

Under the pressure of increasing population, and migration, as well as changing the land use pattern, there is ample ground for ethnocultural conflict. Much of the friction remains latent. But judged by the abusive language evident in ethnic web pages, mutual

antagonism is very strong. The environment, especially the forests, becomes the easiest victim. For example, the conflict between farmers and nomads, which has become the conflict between various ethnic groups, and has been made more acute by demographic and economic pressures and natural and artificial environmental degradations, always leads to deforestation by both farmers and nomads; not to mention migrants who cut down trees for economic profit. This process is always evident whenever one studies Taleshi- Tati, Taleshi- Azerbeijani, Tati- Azerbeijani, Taleshi- Guilak, Tati- Taleshi-Azerbeijani, as well as other inter-ethnic conflicts in the region.

When a language is excluded from the development communication, the outcome is not always zero- sum, with one party gaining and the other losing. With the language come the knowledge, and historically shaped modes of perceptualization and conceptualization, which are lost to the detriment of all sides, as a result of not being leveraged and utilized. The exclusion of the Taleshis, especially their more socioeconomically disadvantaged strata, from development communication, for example, deprive the planners of the possibility of viewing the development project from the mindset of aboriginal nomads. The latter tend to seek not an optimal steady state, but continual adaptation. Sustainability assumes altogether new meaning from that outlook. Even without human intervention, the region has very fragile environmental conditions. There is the threat of natural disasters like flooding and earthquake, which has been responsible for taking many lives in recent past. Being native. Taties and Taleshies have not only accumulated much indigenous knowledge in their linguistic and cultural capitals, but also indirect and implicit memories, unconscious codes of behavior, even emotions, about where to build houses, what to cultivate and where, what to avoid, etc. that escape the consideration of non- aboriginal planners. The interested researcher cannot fail to take note of the immanent threat latent in the continuation of the present course of development, and the very valuable insights on dealing with those threats contained in those vernacular cultures and languages. Like a body that is already fragile, the environment cannot take in and must reject foreign elements like very fast growth of rice plantations and tourism. There are many published works and analyses documenting the implications of careless use of technologies, many commissioned by the very donor organizations that are responsible for approving development projects. But when it comes to specific practices, old mistakes tend to be repeated.

The problem of earthquakes, floods, and landslides is very important in the region under consideration. Already the tectonic activities and the geomorphology of the region pose serious problems. So does the balance between the marine, aquatic, and terrestrial ecosystems, which has already been mentioned. The steepness of the coastal land makes the situation more critical. There are many rivers and rich underground water resources. Rice plantation is associated with high water consumption and irrigation requirements. Rapid urbanization, construction of townships alongside highways, villas for the tourists and summer retreat for the rich, pose additional problems associated with the waste. Deforestation, overutilization of land, overconsumption of water resources, and changing the land use patterns all increase these dangers. These problems are all present in the region under consideration. Main environmental risks can be categorized into the impact

of natural disasters, increasing land erosion and salination, and limited availability of healthy drinking water. The area is subject to earthquakes, landslides, mudslides and floods. Often these natural disasters are worsened by human activities such as the use of the mountainous areas and lowland plains for cattle grazing, deforestation, small-scale agriculture, mining and road building. Landslides are very common where the surface is not covered with dense vegetation. In drainage basins in the northern part of Iran, a combination of natural and human factors has caused numerous landslides with a lot of damage. Naturally effective factors in landslide occurrence are slope, altitude, aspect. rainfall, land use, geology, and distance from faults, distance from old and new roads and distance from main drainages. Careless development projects can increase these dangers. This discourse, however, is carried out in vernaculars like Taleshi that are not heard in the development communications. The outcome is much more serious than not having mobilized the whole population because communicative and cognitive sustainability is a prerequisite to economic and sociopolitical sustainability. Failing to hear vernacular voices leads to the failure of the development planners to avail themselves of their latent wisdom, and cosmovisions.

### 4 Conclusions

It has been conjectured that disregarding vernacular languages and cultures condemns rural development projects to impoverishment. The arguments presented in this paper attempt to go beyond the premise that it is important to deal with the problem of cultural and linguistic diversity in order to achieve sustainability. It is held that diversity is to be viewed as blessing and not as a problem. The central role of language and culture can be seen when development is viewed as a sense making activity. The paper stresses the role of new capitals in contemporary development process and discusses the role of linguistic and cultural capitals not only as important assets to be leveraged in rural development projects, but as social relations especially in the capital accumulation process. Communication is a very important part of implementing the modernization process both linguistically (the national language is not normally used at the village level) and cognitively (dissimilar awareness). It has become evident that communication problems, and difficulties concerning consensus-building at community level, will inevitably include disagreement among actors located at different levels of the communal networks responsible for the promotion of development.

Research and practice provide ample evidence of the importance of human linguistic and cultural diversity, on the one hand, and biological diversity, on the other. They also point to the complexity of human-environment relationships on earth, and suggest fundamental links between human languages and cultures, non-human species, and the earth's ecosystems. In particular, evidence is accumulating of remarkable overlaps between areas of largest biological and greatest linguistic- cultural diversity around the world. It has been noted that models of development have been profoundly Eurocentric, conflating development, modernization and westernization, and promoting particular worldviews, cultures and technology- oriented rationalism. Participatory and indigenous models of rural development are advocated instead. The notion of sustainability has become an important consideration. But there is a contradiction between the modernist progressivism of development discourse and the postmodern particularism of aspects of sustainability. The question to be asked is what is to be developed and what is to be sustained. This question is value ridden and answers can vary in accordance to ideology. Vernacular languages and cultures, it is argued, encompass ideologies, modes of perception, and implicit knowledge that are neglected in contemporary rural development projects.

Interest in the contribution of indigenous knowledge to a better understanding of sustainable development has been catalyzed by UN Conference on Environment and Development. UNCED highlighted the urgent need to develop mechanisms to protect the earth's biological diversity. An ever-growing body of research on vanishing cultures, language endangerment, shift, and death, biodiversity loss and environment destruction has emerged in recent years. As different worldviews and knowledge systems collide, however, the bottom-up formula of participation will not easily marry the essentially top-down framework of development and modernization. It will lead to a confrontation of social actors with different epistemologies. Areas of biological diversity, such as the earth's remaining rain forests, are both the most poorly known to science, and those in which biodiversity loss is most dramatic. These same areas host the world's highest concentrations of linguistically and culturally diverse human groups, who have traditionally lived in close contact with their ecological niches. The oral, rural and powerless nature of indigenous knowledge has made it largely invisible to the development community and to global science. Throughout the recent past, for example, women's knowledge of forestry, trees and firewood have been ignored. The WORLD CONFERENCE ON SCI-ENCE (1999, Budapest) recommended that scientific and traditional knowledge should be integrated into interdisciplinary projects dealing with links between culture, environment and development in areas as the conservation of biological diversity, management of natural resources, understanding of natural hazards an mitigation of their impact. Local communities and other relevant players should be involved in these projects.

Yet, due to a mix of historical, cultural and socio-political circumstances, the social capital embodied in traditional community leaders should sometimes be tapped only with great care, as much of that capital, although grounded in traditional networks of mutual assistance and solidarity is also nested in clientelistic relations among kinship groups of unequal social status. Women's knowledge of their environment, for instance, often thrives within the gendered spaces of work and gets little acknowledgement either in modernistic or traditionalistic development discourse. Many feminist researchers have reported on gender differences in access issues: land tenure, tree tenure; who plants what tree or bush where and when; marital status, age of woman, types of by-product or product utilization, the source of the seedling or planting and for commercial, cash or household use.

A major aspect of the role of the new capitals in rural development, it is argued in this paper, is their leveraging for reproduction of power relations in a community or creation of new socioeconomic divides. The emergence and consolidation of small-scale, local initiatives has been placed at the core of many current development programs, like the examples discussed in the previous section, and has led to a much more important role for intermediaries, facilitators and brokers of development. These actors, mediating between the rural population and project staff, are typically people who comprehend the "project language". Often, they are relatively younger persons who have migrated, learnt the national language well, are functionally literate, but have lost touch with the community resource base and, especially, the norms and institutions that govern it.

The issue of the relationship between the rise of the new type of intermediary and the traditional community leaders, structures and institutions, is particularly interesting and complex. Historically, the latter performed the role of facilitators and assured the mediation between the state and the local population. The problem has also been discussed in an FAO publication (1997), which finds that in the project framework, the mismatch between the system of reasoning of the "development world", imported through the project-language, and the rural (peasant) world brings about a productive misunderstanding which manifests itself in the emergence of intermediaries, whose competence acquired in terms of mastering the project-language makes them real development brokers, who may enter into competition with politically dominant actors at the local level.

Besides redefining power relations, languages and cultures, it has been argued in this paper, encompass modes of thinking and understanding. This role, it is to be pointed out, is not always conscious and explicit. It is often to be found in linguistic and cultural routines, dominant discourses, plays, sayings, slight differences in the meanings, even connotations of words, grammatical structures, rituals, ceremonials, and generally what might be called the memetic pool of the community of practice. A nice illustration is furnished by the Tati word for key money used in Taleshi bazaar. It has been argued that the meaning of the term, due to the fact that Taleshi landlords are reluctant to engage in trade or even construct shops in the land they lease out, is different from the meaning commonly understood elsewhere in the country. The difference not only reflects different communal understandings of ownership, land tenure, and appropriation, indeed indicating differences in the whole economic and financial category of key money, but also provides an example of legal technicality according to which the law of the country is to be contradicted if local "orf" (common practice) so dictates; a point often neglected by the courts.

The argument presented in this paper is that any move to take greater account of local participation will nevertheless still continue with many of the great exclusions that marked modernist development discourse. Social inclusion is the key to leveraging local and global knowledge systems, promoting the notion of language as postcolonial performative, of culture as difference, of sustainable development being about creating the possibilities for being more. The advocated development paradigm is to re-contextualize the idea of progress and the use of more advanced technologies coming from national and international donors, and the systems of local knowledge implicit in vernacular languages and cultures, in a more inclusive framework created in the sense making process of interaction with the environment.

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