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Indigenous Peoples and the Information Society in Latin America and the Caribbean

A Framework for Action

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March 2003

INDIGENOUS PEOPLES AND THE INFORMATION SOCIETY IN LATIN AMERICA AND THE CARIBBEAN: a framework for action

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Summary:

Latin America is home to four hundred indigenous communities, composed of about 50 million people, the majority of whom suffer from various forms of discrimination due to their ethno-cultural background and survive under marginalized conditions that contrast with the modern world around them. Their economic exclusion is based on *general discrimination*, similar to that experienced by the impoverished strata in rural and urban environments; however, their marginalization is intensified due to the *intolerance and ethno-cultural discrimination* existing in the national societies of the region.

The paradigm of economic globalization is sharpening the historical processes of social marginalization of the indigenous peoples. Meanwhile, in the cultural arena, a process of “homogenization” is beginning, which attempts to undermine the pluricultural identity of the continent, ignoring the fact that the construction of modern citizenship involves the challenge of reconciling the historical and cultural specific features of each community with world development and modernity.

However, the causes of the increase in indigenous exclusion and their current marginalization from the information society are not exclusively attributable to the unequal relations generated between the center and the periphery. Furthermore, the analysis must be focused on the internal dynamics of these societies and their forms of leadership, on gender relations and the migratory processes that define the differences between indigenous groups and individuals with respect to the educational level, ethnic awareness and acceptance of one’s identity, possibilities for involvement in non-traditional activities and on the acceptance or rejection of the digital means of communication. In some cases, intellectuals, directors and indigenous organizations have seen the ICTs as a valuable opportunity to transcend the local level and achieve a regional, national and international presence. Digital technology has rapidly and efficiently been appropriated and has the potential to strengthen their political-organizational and communication processes, as well as those of linguistic and cultural revitalization. Also, other indigenous sectors have criticized the ICTs as a new form of interference from the national society that attempts to add the communities to the established information consumption in order to serve the interests of others.

To promote indigenous involvement in the information society, it is necessary to define proposals of innovation and reparatory social policies, which strengthen indigenous attempts to overcome the challenge of information marginalization. The strategies to achieve this end come from the native people who have achieved greater levels of community cohesion and representation, direct and legitimate, in second- and third-tier organizations. In some cases, the non-indigenous political and civil societies start to support these processes, generally at the local level. However, as far as public policies are concerned, the consensus necessary to act in an integral and coordinated manner has not been reached. Such a consensus would join governmental forces with those of the international community and civil society associations, in order to stimulate the so-called “digital opportunity”.

The current **Virtual Workshop on Indigenous Involvement in the ICTs** provides a space to deepen the conceptual debate and contribute to the development of a framework for action that

¹ Officials of the Population and Development Latin American & Caribbean Demographic Centre (CELADE) at ECLAC. This document has been reviewed by Luis Barnola (ICA), who made many valuable contributions which were incorporated into the text.

facilitates indigenous access to the ICTs by serving as a vehicle of social transformation. The Virtual Workshop is a window of opportunity that adds proposals for an integrated course of action from a great diversity of criteria, experiences and cultural perspectives.

Challenges	Opportunities	Proposals
<ul style="list-style-type: none"> * Cultural prejudice of governmental agencies, NGOs and broad sectors of the national societies. * High levels of distrust within the indigenous communities with respect to the possible disruptive impact of the ICTs on cultural and social guidelines. * The gap between the cultural conception of time and space of the indigenous society and the global society. * Low levels of literacy and computer literacy of the indigenous peoples. * Intra-community processes that impede the appropriation of the ICTs. * High unemployment indices; weak indigenous economic base. * Rate of technological change that impedes the community decision-making process. * Elevated costs of technological infrastructure, associated with geographical isolation and a lack of basic infrastructure services. * High levels of technological obsolescence. * Absence of legal frameworks that facilitate access to credit lines and/or funding for technological programs. * Expansion of the ICTs according to market logic. * Concentrated production of hardware and software in a small nucleus of industrialized countries. * Predominance of English in the technological arena. 	<ul style="list-style-type: none"> * The indigenous communities' historically successful appropriation of the global society's cultural goods. * Ascent of the ethnic movement to the continental level. * Existence of new types of leadership. * Rise of second- and third-tier organizations. * Greater recognition of the global society of the role of the indigenous peoples in the sustainability of development. * Increase of the international social sensitivity towards indigenous demands. * Experiences of economic, political, cultural and information self-management. * Increase in the educational level of the population, especially the migrants, leading to a significant number of indigenous professionals. * Greater acceptance of the incorporation of the gender equity approach. * Social experience accumulated starting from the effective appropriation of the ICTs by the people and organizations that independently manage the communication and information strategies. * Installed capacity in technical and human resources. * Experiences of e-involvement carried out through the model of shared access (telecenters). * Increase in social capital of the communities. 	<ul style="list-style-type: none"> * Reduction in the levels of prejudice and discrimination in the national societies, through specific communication strategies. * Promotion of favorable attitudes towards the ICTs in the indigenous population and leadership. * Implementation of specific access programs (short, medium and long-range), designed following integral diagnostics carried out with the active participation of the indigenous communities and respectful of their social, cultural and economic structures. * Articulation with long-range economic, social and cultural programs that involve strategic investment to provide basic services (electricity, telephones, education) and promote the autonomous organization of the indigenous peoples. * Legal regulation of the participation of the private sector in such programs and support of the public sector when the market cannot provide effective solutions to combat social inequality. * Implementation of long-range programs that permit intra-community exploration to decide in what way the ICTs will be incorporated, on the premise that the indigenous communities can decide to use them in a different way than other groups of the national societies.

	* Increase in the technological incorporation of information literacy in basic education.	
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A. Digital divide, the new name of exclusion

The presence of the information society is producing a crucial transformation in the form in which people communicate with each other and organize themselves before the challenges of globalization. An important scenario is created in societies that require appropriate tools to promote their inclusion in modernity². For Latin America and the Caribbean, a region with profound economic and social inequalities, the transition toward the emerging paradigm of the information society could mean an unprecedented opportunity to incorporate new paths for development with equity of its citizens.

At the threshold of the new century, economic adjustment and globalization of the economy are producing profound technological, political, and socio-cultural restructuring that sharpens the differences between the sub-regions and marginalizes broad sectors of the population. In the long run, unequal development at the global level creates new dimensions that sharpen the poverty and exclusion within each social organization. In this sense, the international digital divide is directly associated with the preexisting socioeconomic conditions in Latin America³; therefore, the internal digital divide in each of the countries increases the various types of exclusion experienced by the most underprivileged groups⁴, among which the indigenous peoples form one of the sectors with the most extreme social lag.

If one maintains that the digital divide “should not be measured only by the possibility to utilize the latest communication technologies but, also, in terms of the capacity to process information and the ability to create mutually beneficial systems that can help improve the quality of life” (CV Mistica, 2002), it is possible to conceive the size of the abyss between the native populations’ current position and their achieving an effective technological appropriation that can stimulate an agenda of development with equity.

In terms of ethno-cultural diversity, the Region has more than four hundred indigenous groups that are ethnically differentiated from each other and display a large variety of cultural manifestations; many of the countries are multi-ethnic and pluricultural. While some of the original populations have few members, many others exceed a quarter of a million and, in some cases, constitute a country’s majority population⁵. The total indigenous population of the continent is estimated to be 50 million. Most of these individuals are discriminated against because of their ethno-cultural identity and survive under conditions of economic and social marginalization, which creates ostensible contrasts between the modern world and the neglected settlement areas⁶.

2 “The information society should be aimed at overcoming the socioeconomic differences that exist in our societies, try to ensure that globalization becomes a positive force for all the people of the world and help to reduce the disparity between developing and developed countries”. Bavarian Declaration, preliminary Regional Ministerial Conference of Latin America and the Caribbean for the World Summit on the Information Society (January, 2003).

3 “There is a direct relation between income and access to the Internet. The countries with lower income levels tend to show lower penetration rates”. Hilbert and Katz (2002).

4 “ECLAC estimates that the domestic digital divide in the countries of Latin America and the Caribbean is even more serious than the international divide”. Hilbert and Katz (2002).

5 “Socio-cultural Research in Population: Strategic criteria for Latin America and the Caribbean, in Population and Development Series, Document 1, EAT-FNUAP-ALC, Santiago, Chile, 1994.

6 In Guatemala, Mexico, Bolivia and Peru, the percentage of the indigenous population living in extreme poverty exceeds 60% (Peysner and Chackiel, 1994; Hernández, 1994; Psacharopoulos and Patrinos, 1994). Even in countries such as Chile, the 1996 National Socioeconomic Characterization Survey (CASEN) shows that while poverty affects 35.6% of the indigenous population, only 22.7% of the non-indigenous population lives under such conditions. In other words, in 1996, the difference was more than 12 percentage points (Valenzuela, 2002: 8). Also, according to the 1992 National Population Census, among the poor, rural residents of the Araucanía Region who have unmet basic needs (UBN), 51% identified themselves as Mapuche (Martínez, 1998).

Latin America and the Caribbean make up one of the regions that still has not consolidated sufficient social forums for the debate, clarification, criticism, and expression of ethno-cultural demands, all of which will lead to the difficult root sustained by intercultural and inter-ethnic relations. These forums could unveil the reason of being, and have also paved the way to overcome these difficulties, instead of hiding them and appealing to the supposed benefits of forgetting or denying one's roots, or the proliferation of simple statements of tolerance which are always useful, but insufficient⁷.

The Latin American states, supported in brave declarations in the latest world forums, legally recognize the equality of rights for all of their citizens, stating explicitly and emphasizing that this equality applies to members of all races and ethnic groups historically discriminated against. However, in their daily practices and routine behavior, actual societies, their governments and people promote an unequal treatment of the members of the native cultures⁸.

The contradictions between "legal" society and "real" society are part of the constitution of the modern states. While socioeconomic and political marginalization exist in the indigenous communities of the Region, current legislation regarding egalitarian integration will be nothing more than one of the emerging elements of these contradictions. The equality of rights with actual inequality strengthens the discrimination hidden within society and tends to inhibit and demobilize the groups directly affected⁹.

The economic exclusion of the indigenous peoples¹⁰ is based on the *general discrimination* that all impoverished strata of the city and countryside experience; however, because they belong to communities that have a different culture and history, they face another form of discrimination, namely *intolerance and specific types of discrimination*, based exclusively on their ethnic and cultural distinction¹¹.

The continuous social diffusion of a devaluating point of view of that which is "different" permeates all sectors of the national societies: the indigenous peoples are not only discriminated against by the most privileged sectors, which could be due to an inherited colonial ideology, but, also, by the non-indigenous members of their own social sector. This might be due to the poor, non-indigenous citizen's preference to identify himself culturally with the behavior of the

7 Ethnic and cultural discrimination is a social phenomenon produced by ethnocentrism, which has historically stimulated xenophobic behavior that is prejudiced and devaluating of the "other" (foreign, alien, different). Paradoxically, recognition of that "other" is essential for the consolidation of identities in all authentic models of democracy.

8 In many social practices there is evidence of racism, ethnic discrimination, xenophobia, and their related forms of intolerance that persist and intensify in Latin America and the Caribbean. This concerns phenomena that stem from deeply-rooted ethnocentric behaviors, established and "creolized" as historical justification for the genocide committed during the Conquest. They were later expanded during the Colonial Period and the Republic and persist today, serving as a necessary means of justifying the economic, social, and cultural marginalization of the indigenous and afrodescendent communities.

9 Some of the events of our history can explain, in part, the origin of these current contradictions. As power over the new Latin American states was consolidated in the early 19th century, various legal provisions granted citizenship "with equal rights" to the indigenous peoples of America. In this way, the intention to integrate "unequal" communities under "equality of conditions," was made explicit, formally comparing differentiated and antagonistic ethnic entities. Although national societies showed proof of their ideal advancements in equality and democracy inherited from the French Revolution, they immobilized the indigenous peoples, deeming as "unjustified" all acts of protest or just rebellion. A paramount example to clarify this point is the controversial and inequitable allocation of community land, a problem that has yet to be resolved. In most cases, liberal court legislation denied collective systems ownership of the land, thereby depriving the indigenous peoples of their traditional productive organization and confining them to the large estate, in semi-servitude conditions. Later, in many cases, the agrarian reforms drove them to desert or eroded areas, condemning them to the unproductiveness of a smallholding.

10 Historically, the dominating people view the dominated people as "barbaric and heretic", a necessarily degrading opinion to justify the violent imposition of their way of life and, in this way, to defend their economic interests. Thus, one starts to discriminate because one dominates and later continues to dominate because he discriminates.

11 As the Peruvian novelist Galindo masterfully described in "Garabombo, the invisible": If a poor peasant (a Quechuan from Cusco) presents himself "poorly dressed" in a public office and says that he does not know how to read or write, the civil servant will hardly perceive the objective features of his extreme poverty. These features disappear as such and come to be exacerbating agents of an ethnically devalued condition. In the case that one might "be considered" (i.e. overcome his/her "invisible" condition in the waiting room), he will be treated in shameful terms, such as "Indian" ("different, dirty, and ignorant"), and not with the routine and less severe indifference with which poor and illiterate peasants are treated.

hegemonic and privileged sectors, or because his contempt for the devaluated “other” confirms the existence of another “inferior” group on the social scale that allows him to obtain secondary benefits in possible public alliances and opportunities to accede to a greater social participation.

Faced with this scenario established contradictions and devaluations, we must admit that only meager results can be obtained in the reduction of information marginalization of the native communities if actions are carried out only with the groups affected, without developing strategies to dismantle the mechanisms of exclusion in the broadest sectors of the whole of society. The construction of modern citizenship, penetrated by tensions between the strengthening of the identities of the ethnic minorities and the cultural homogeneity proposed by the recent paradigms of modernity and globalization, implies assuming the challenge of reconciling the historical-cultural specific features of each community with development and modernity.

B. The indigenous peoples and the challenges of the third millenium

In the last decades, the technification seen in some agricultural sectors has further marginalized the indigenous peoples in the production circuit. The movement of the smallholding economy towards a highly productive and self-sustainable agricultural one has been impeded by the scarcity of land and technical and credit abandonment.

Environmental deterioration increased in many areas where indigenous peoples live, whose survival depends on the protection of renewable natural resources. For the majority of the native communities, land and its natural resources are considered “property” since they have to do with the habitat, or “living space”. In no way are they considered “goods of exchange”, as established in the rationality of extensive commercial exploitation. This contradiction produces new conflicts¹², greater impoverishment, and an increase in migration as well as in the sector’s vulnerability.

Within the framework of an economic model that causes recurring, recessionary situations and restrictions on the labor market, indigenous marginalization is becoming worse. As a reduction in work opportunities increases competition, the unequal pressures on the job market become stratified by various types of discrimination. For example, the ethnocentric behaviors of the employers favor the applicants’ belonging to the hegemonic social group over their professional qualifications; consequently, the average income of the total indigenous population, women and men, is less than that of the non-indigenous population, even in countries such as Chile¹³.

Technological development and the growing incorporation of the national societies in the paradigm of the information society creates a serious domestic digital divide in each of the countries¹⁴, in which the indigenous peoples form one of the sectors that is lagging the most in

12 See, for example, the current conflicts concerning the extraction of hydrocarbons in the indigenous communities of the Peruvian Selva, the Bolivian Chaco, and Neuquén Province – Argentina, in the following web sites: www.coppip.rcp.net.pe, www.conaie.nativeweb.org, www.xs4all.nl/~rehue, www.cec.uchile.cl/, www.fquezada/indigena2.html, www.fidamerica.cl/seccionlucy.ukc.ac.uk/Rainforest/indigesp.html. Similar conflicts with forest industries in the Bolivian Orient, Panamanian Selva and Chilean Araucanía in www.cidob.bo.org, www.linux.soc.uu.se/mapuche, www.lasemanajuridica.cl, www.ecosur.mx/altos.lucy.ukc.ac.uk/Sonja/RF/Sppr/spainc.htm, www.semarnat.gob.mx/qroo/agendasectorial, www.reforma.com/internacional

13 At the beginning of the 1990s it was affirmed that the Mapuches differed “notably from the rest of the indigenous peoples of Latin America in their quality of life, which has more favorable indicators (UFRO-INE-FII-PAESMI and CELADE, 1991: 4). A recent analysis of the 1996 CASEN Survey (Valenzuela, 1998 and 2002) shows marked differences between the salaries of indigenous and non-indigenous peoples: “The average income of indigenous peoples reached \$120,665 in 1996, while that of the non-indigenous population reached the notably higher average of \$217,916. The greatest percentage of the indigenous population is concentrated in agriculture (38.5%). In this sector, the average income of the non-indigenous population is almost double that of the indigenous population, at \$128,589 and \$66,800, respectively. The same occurs in the rest of the areas of activity as well (Valenzuela, 2002: 12). The significant differences in salary between the indigenous and non-indigenous populations, taking into account the fact that for the same occupation, indigenous peoples receive inferior salaries, as well as the precariousness of their work or the greater tendency to work without a contract or labor rights, are fundamental background information for defining “ethnic poverty”; this is a scheme in which not only differences in educational levels or qualifications could play a role, but probably also elements of discrimination against those who belong to an ethnic minority (Valenzuela, 2002: 13).

14 Hilbert and Katz, 2002; UN ICT Task Force, 2002; CV Mistica, 2002; WEF, 2002; Digital Opportunity Initiative, 2001; SocInfo, 2000.

terms of access and appropriation. Their marginalization from the new information and communication technologies (ICTs) reinforces their limitations to become involved in a job market that has a growing need for them. However, for most indigenous peoples, the ICTs form part of the group of goods of the global society that they see as indispensable, destined for other, more socially privileged sectors, and from which they tend to experience an enormous distance in technical and, above all, cultural terms.

These recent phenomena, resulting from the new paradigm of economic globalization, add to the historical processes of social marginalization of the indigenous peoples. These processes are reproduced, activated and strengthened before each new act of exclusion, such as those that neoliberalism and its globalization model are producing in the Region. Also, exclusively in the cultural arena, the dissemination of an ideology-support of globalizing macroeconomic concepts stimulates a process of “homogenization”, which undermines that pluricultural identity of the continent.

However, the causes of the increasing exclusion of the indigenous peoples and their current marginalization from the information society are not exclusively attributable to the unequal relations generated between the center and the periphery, between “backwardness and modernization.” Furthermore, the level of analysis should be focused on the internal dynamics of the indigenous society, on their communities and leadership.

Even though the socioeconomic lag of the indigenous peoples could be attributed to the deterioration of the peasant economies and the marginal-urban sectors, there are certain features of their socio-political and cultural dynamics that sharpen the aforementioned exclusion and bring awareness to various cultural behaviors, often opposing, which not only concern economic development, but also their degree of community cohesion and association with new technologies.

In order to start to define strategies that stimulate the participation of indigenous peoples in the basic codes of modernity, a more precise analysis highlights the internal differences existing in a population that, as a whole, is in an unfavorable position in terms of its access to goods and services. Such differences refer to longstanding inequities (by gender, social stratification, generation, etc.) and new cases of marginalization related to more recent population processes, such as the increase in migration for economic reasons and displacements provoked by border wars and regional and intra-community conflicts. The changing scenario to redefine the limits of ethnic entities establishes distances in the educational level, the conscience and acceptance of one's identity, the possibilities to obtain work in non-traditional activities and, in particular, the interaction with the digital means of information and communication.

In the first place, it should be mentioned that the gender inequities that impede women's development affect the quality of life and the well-being of the communities. For women, there is not an equal relation between physical and social reproduction and their access to productive, educational and communication resources; gender roles are assigned at an early age and are always prejudiced against women¹⁵. Only a minimal percentage of women at an active age manage to enter the job market in the few populated centers. On average, they receive half the salary that men receive¹⁶.

15 In Guatemala, the situation of women reaches ostensible levels of marginalization: only 51% of women over 15 years old are literate, 27.5% are integrated in the work force, 14.4% are heads of their families, and 19.6% are single mothers. The total fertility rate is 5.4 children per woman during her reproductive life (FLACSO, 1993). However, in this context, the situation of the indigenous woman is even worse: only 14% of indigenous women are literate and the fertility rate is 6.8 children per woman. A high proportion of rural-illiterate indigenous women are monolingual in their native language (See: Hernández, 2001). Although Spanish is the official language of Guatemala, 21 indigenous languages are recognized and represent an equal number of linguistic communities. Indigenous Guatemalan women are being hurt by the economic crisis as well as by war within their country. The phenomenon of “feminization of the poor” is severe in this country and is seen as due to interethnic frictions produced by the situation of marked social and cultural heterogeneity (See website: www.eclac.cl/bialfa).

16 See: Rovira, 1998 and COBIDEFRO and others, 1999.

Scholastic desertion affects women in a different way than it affects men for reasons such as early pregnancy, involvement in domestic work or other economic factors for which the education of men is favored; girls are discriminated against in access to and continuation in the educational system¹⁷. Also, the rights of indigenous women are continually violated¹⁸. However, the problem is generally not approached from the scenario of multiple domination in which they find themselves, attending to socioeconomic, ethno-cultural and gender considerations¹⁹. The interaction of these factors produces a complex set of inter-ethnic frictions and subordination of women²⁰. In cases such as those of the *Tsotsil* and *Tzeltal* (Mexico), *K'iche*, *Mam* and *Q'anjob'al* (Guatemala), *Quechuas* and *Aguaruna/Huambisa* (Peru) women, the psychological effects of the violence suffered during armed confrontations and isolation create, with marked regularity, identity conflicts, dejection, depression and a strong deterioration of self-esteem. To this set of extreme submission and devaluation one adds the endemic and generalized phenomenon of illiteracy²¹.

Therefore, the deruralization process of the youngest members of the communities tends to have a negative impact on the internal cohesion of the indigenous groups; in fact, the migratory movement affects and threatens the continuity of the ties of solidarity based on the kinship and reciprocity relations established in each culture. There are frequent rivalries between "those who left" and "those who stayed" in the communities, even though in neither case are strictly individual "options" concerned, but rather different survival strategies in a situation of shared impoverishment. In a context that is unfavorable for the economic survival of the families because it is based exclusively on agricultural production, *land*, a symbol-support of *identity*, is associated with each youth who assumes the mandate of his ancestors and continues working the plot of land of his parents and grandparents. However, not all of them are chosen to maintain the "living space", that piece of land that offers a sense of ethnic belonging. It is also the place to which emigrants periodically return to mitigate their involuntary uprooting. The system of possession of the land—the smallholding and its subdivisions—is one of the principal causes provoking an expulsion of the residents; this expulsion, in turn, is increasing the indigenous presence in the periphery of big cities.

In their new locations, the migrants find themselves in continuous interaction with the non-indigenous society. This situation increases the phenomenon of discrimination and the inequality of opportunities for the indigenous peoples who recently arrived in the environment. Despite suffering from the consequences of the stigma of their native background, for most of them and, certainly, for the new generations born in the city, there are certain advantages to living in an urban environment. Some of these advantages are the acquisition of or improvement in Spanish

17 See: UNESCO, 1999.

18 See: Women's Committee-SAIIC, 1995; CMPI, 1996; Rovira, 1998.

19 Just one example: the statistics about the composition of the indigenous population of Peru are based on the self-ascription of speakers of native languages. According to the 1993 Population Census, based on this indicator, a fifth of the total population is indigenous. While infant mortality in the entire country was estimated to be 48 per 1,000 live births in 1999, in the departments with high indigenous concentrations (Huancavelica, Cusco, and Puno/languages Quechua and Aymara), it was 87.3, 74.2, and 72.1, respectively. For comparison, one can consider Lima, where it was 19.4, and the Constitutional Province of Callao, where it was 16.3 per thousand. Also, in 1994, the infant mortality rate for illiterate mothers was estimated to be 102 per 1,000 live births, while for mothers with higher education, it was 21 per 1,000 live births. Maternal mortality is differentiated by area and region as well: 408 per 100,000 in rural areas to 203 per 100,000 live births in urban areas, with abortion occupying the third direct cause of this type of mortality (COBIDEFRO, 1999). Concerning the departments of Amazonas, Loreto, and Cajamarca (languages Aguaruna, Guambisa, and Shuar), the average is more than 80 per 1,000 live births. Maternal morbidity reaches 480 per 100,000 in these areas. Illiteracy is primarily feminine (in 1994, illiteracy among women exceeded 60%, while among men it was less than 30%). A high proportion of the women are illiterate; in the province of Condorcanqui (Amazonas), 4,000 are illiterate; in the province of Alto Amazonas (Loreto), about 22,000 are illiterate; and in San Ignacio (Cajamarca), more than 19,000 are illiterate (these statistics are always reported in absolute numbers). In these departments bordering Ecuador, poverty conditions affect 53% of the population and extreme poverty conditions affect 22%. Malnutrition indices fluctuate between 60% and 75%. The highest number of inhabitants in these conditions are found in rural areas, where one finds the lowest incomes, insufficient services, lack of adequate living conditions and schools combine with the highest fertility rates and maternal-infant morbidity and mortality rates (MINISTERIO, 1998).

20 This situation is associated with significant damage to integral health (endemic diseases and diseases associated with poverty) and reproductive health: maternal-infant morbidity and mortality, early and/or unwanted pregnancies, sexual violence and the rapid propagation of sexually-transmitted diseases, especially HIV-AIDS. See: Hernández, 1997 and 1998.

21 See: web site: www.eclac.cl/bialfa

as a second language, the possibility to study at various academic levels, employment opportunities that require higher qualifications, the stimulus of various forms of consumption through daily contact with the cultural offerings of the cities, means of mass communication and new information technologies, etc.

Some of the children of peasant origin who have had access to work opportunities, training, political and union experiences in the city are becoming the new generations of indigenous leaders. They have the behaviors and values of a culture in which one finds both features of an autochthonous cosmovision and a modernizing social point of view that is sometimes expressed in proposals for self-management starting from the recuperation of one's ethnicity. The conflicts between old and new leadership are numerous and make up a split that is comparable to that which the political parties or churches and religious sects have produced exogenously for decades.

In some cases, intellectuals, directors and indigenous organizations have seen the ICTs as a valuable opportunity for them to transcend the local level and achieve a regional, national and international presence. Digital technology has rapidly and efficiently been appropriated and has the potential to strengthen their political-organizational and communication processes, as well as those of linguistic and cultural revitalization, etc. The most well known and important case is that of the Zapatista Movement (EZLN) in Chiapas, Mexico, though there are numerous other experiences as well, from different angles and interests, that show the capacity to incorporate the ICTs and advance self-management. Also, other indigenous sectors have criticized the information technologies as a new form of interference from the national society that intends to add the communities to the established information consumption to serve the interests of others.

The existence of the aforementioned internal tensions is a critical aspect for the process of indigenous involvement in the information society. The role of leadership is very important because it influences the possibilities for the population's access; the ideological stance of the leaders regarding the worth of the ICTs determines whether they will be incorporated as cultural goods produced by the national society. Such differentiated positions are related to the long-term impact of the multiple, incomplete attempts for an equitable incorporation in the surrounding society; in other cases, they result from a conscious political will that denies a greater participation due to the fear of losing the ethnic and cultural specific features, as they do not recognize the fact that social integration is not incompatible with autonomy. On the other hand, these particular expressions of ethnic resistance generally obscure the existence of opportunities that help the indigenous stakeholders to guide the modernization process, articulating it with the identifying characteristics of each native community.

C. Some experiences of indigenous participation in the information society

Until the present, no exhaustive studies have been carried out on the levels and paths of access, use and purposes of the indigenous peoples who have involved the ICTs in their daily activities. Census records do not show breakdowns by ethnic origin of the users. Those census records that have recently included this variable, such as in Chile, are currently being developed and their results will be available in 2003.

In some countries, like Mexico, Ecuador or Peru, there is an increasing number of indigenous peoples who have studied at the secondary or higher educational levels or who, due to their participation in social and political processes, are capable of self-managing communication and information strategies. Without a doubt, the presence of the individuals and organizations in the information systems, as well as the democratization of access to the ICTs, helps to modify the stigmatized image of the indigenous peoples that ethnic prejudice has established in the collective point of view. Furthermore, it promotes a diversity of discourses in a hegemonic global environment. However, in terms of a broader participation of the population as a whole, few pilot programs are being designed or implemented for Internet access through the construction of

community information centers, according to the shared access model. ECLAC's perspective places greater social significance on community or private proposals of this nature, which create opportunities for participation for the marginal sectors lacking access to the new technologies (see box), than to the expansion of individual proprietorship of the means of communication²².

The most significant advances in this area have been made in the extreme north of Latin America. In 2003, the Monterrey Institute of Technology (Mexico) began the gradual installation of 500 telecenters in the communities of various linguistic groups of the country. These centers have been intended for the acquisition of reading and writing in Spanish through computerized learning methods. However, the articulation between individual learning and collective training, which is the community's form of transmitting knowledge, is relative.

There have been advances made in South America as well; in Columbia, the Inforcauca project, promoted by the International Center for Tropical Agricultural (CIAT) and the Universidad Autónoma de Occidente (UAO-Cali), with the financial support of the International Development Research Centre (IDRC) of Canada and the Rockefeller Foundation, have put into effect three community telecenters to facilitate the residents' access to information about the economy and sustainable management of natural resources. In Chile, the Red de Información Comunitaria del Instituto de Informática Educativa of the Universidad de La Frontera, Temuco (9th Region, La Araucanía) facilitates access to people and organizations of the region. Its homepage, available in Mapudungun, Spanish and English, has links to 21 communities with telecenters, serving as a connection between local and universal space. In the area northeast of the border between Ecuador and Colombia, the communities A'íto Cofán, Siona and Secoya, members of the Amazonian Defense front, participate in the Community Networks project, which has three telecenters through trained community promoters.

The Bi-literacy Regional Project on Population Topics (BI-ALFA - CELADE/ECLAC) offers a model that is inter-institutional and concerns integrated subject matter, validated in various linguistic communities of seven countries²³. It involves two methodologies (computing technology literacy and basic bilingual literacy) for men and, especially, women, in different cultural and community contexts (marginal-urban and rural). It is based on the opportunity to learn to read and write in one's native language and Spanish. The BI-ALFA method combines individual appropriation of the new technologies with collective instances of training and participation that place an emphasis on the oral aspect of the learning method. The challenge of overcoming information marginalization consists of designing pedagogical strategies that involve computerized learning in order to achieve the same objective as with reading and writing: the process of "internalizing" concepts referring to community organization, ethno-cultural self-affirmation, self-care of family health and the improvement of production, from a gender equity approach. Therefore, computing technology literacy permits inclusive access in the global information society and participation of the indigenous peoples, without harming their culture or identity. The work experience in the Community Centers has shown a significant rise in the "social capital" of the populations, the knowledge of new information and communication technologies (through a process of feedback of images, as well as the slow introduction of computers for the local technical personnel) and, in turn, the strengthening of the traditional community organizations, in particular those of women. BI-ALFA utilizes the ICTs in an environment that is totally marginal from all technological development; in many cases, not even the most basic services are available, such as electric energy. However, the possibility to use generators to power the video equipment permits the projection of videos where indigenous adolescents and children of both sexes see themselves not only learning to read and write, but, also, acquiring knowledge about health care or agro-ecological techniques. The projections take place one after another so that the participants can see themselves improving their learning process, changing and growing, thus generating a broader understanding about their relations with their partners, the community and the world in which they live. Also, the ability to share the videos via the Internet contributes to the presence of indigenous subject matter on the network and facilitates access, even in the case of the illiterate and/or monolingual users.

22 "In the entire region, one of the most common solutions to confront the digital divide is the shared access model. Initiatives of this type not only help to overcome the access barrier, but also have positive effects in terms of training and providing support for the users. ... Peru is the world leader in the public access to the Internet. However, this diffusion is due to private initiative, which created the locations for public Internet access. ...The growing number of people who share an account for Internet access confirms the tendencies found in all developing countries, above all those that have economic problems. For example, during the last two years of reduced growth in Venezuela, the number of Internet users duplicated significantly" (ECLAC, 2003).

23 Mexico, Guatemala, Peru, Bolivia, Paraguay, Chile and Argentina (See: www.eclac.cl/bialfa).

In a first attempt for systematization, which requires greater evaluation and depth, it is possible to develop some categories that espouse the modes that the indigenous peoples have acquired in the information networks. This preliminary approach is accompanied by some illustrative examples, though they should not be thought of as pertaining to only one course of action, subject matter or distinctive note, as many of the web sites can be included in several categories at the same time.

a. By the ethnic origin of their creators:

1. *Developed by non-indigenous peoples*, generally intellectuals, foundations, academic institutions, governmental organizations, social science professional associations and NGOs. Emphasis is placed on diffusing historical, social, political, linguistic, ecological, ethnic and technical aspects, legislation, denouncements against actions that threaten territories, organizations, people, human and cultural rights, etc. For example, the Linguistic Department at Stanford university, USA www.linguistics.stanford.edu, Fundación Desde América, Argentina www.desdeamerica.org.ar; the National Corporation of Indigenous Development (CONADI/Chile), which includes various governmental ministries as members, www.conadi.cl has web pages about the diffusion of institutional policies for the country's native ethnic groups. It also has an area of didactic resources with general information, specific topics and a photo gallery. In some cases, there is a broader subject matter and notes are included about the specific situation of the indigenous communities, such as Environment and Society www.ecoportel.net; in Peru, the Red Científica Peruana (Infoducts and Telecommunications SA) maintains a site www.yachay.com.pe, which, among other features, offers the first electronic course of the Quechuan language. It was developed by a prestigious indigenous specialist from Cusco.
2. *Produced by indigenous peoples*: this is the case of the web sites developed by local grassroots organizations, NGOs and associations that coordinate the activities of various regional, national and international ethnic organizations. Their objective is to use the web to display the presence and points of view of the indigenous organizations about topics of interest for the communities: globalization, the economy, indigenous politics, relations with the national society and transnational businesses, cosmovision, history, art, native language courses, dictionaries, grammars, etc. In the second group, the multitude of web sites dedicated to the conflict in the state of Chiapas stands out. There are more than 50 such web sites, including official and non-official publications of the EZLN. Some of these sites are considered as open information spaces, which do not admit to a single creator or rights of authorship since they are the result of the collective contributions of those interested in propagating the political positions of the movement.

b. By the level of representation of the institutions:

1. *Web sites that represent only one organization*. The site of Net Mapuche-Chile www.mapuche.cl is produced by a group of Mapuche professionals dedicated to disseminating information about the culture and the people's fight for their identity and independence.
2. *Web sites that represent various organizations concentrated under different forms of inter-institutional coordination in regional and national environments*. In Colombia, the Asociación de Cabildos Indígenas represents 14 institutions of the north of Cauca. Its web site, www.inforcauca.org, promotes the exchange of useful information among peasants, for example, about the work opportunities of the region. The Confederation of Indigenous peoples of Bolivia (CIDOB), www.cidob.org, represents four communities of eastern Bolivia, the Guarani-izoseños, Chiquitanos, Ayoreos and Guarayos. In addition to serving as an

organizational space and a forum for criticism, its web site provides an opportunity for training in the use of the ICTs. In the same sense, the Confederación de Nacionalidades del Ecuador (CONAIE) developed its web site, <http://conaie.org>, with political and educational proposals, as well as those of community organization; it includes links to the sites of national organizations that represent the indigenous peoples of other American countries. The Organización Regional de los Pueblos Indígenas del Amazonas de Venezuela (ORPI) dedicates its site to criticism about the biopiracy of the natural resources, which harms the ecosystem, the home of the native groups of the zone.

3. *Web sites of associations of the sub-continental, continental and international levels.* The Consejo Indio de Sud América (CISA) has created a web site, www.puebloindio.org/ceacisa.htm, supported by the Comité Exterior de Apoyo al Consejo Indio de Sud América (CEA-CISA), which disseminates information about the actions that contribute to the reconstruction of the nations of the indigenous peoples, the vindication their rights and their historical, cultural, social and political roots. The Centro Internacional de Información y Documentación de los Pueblos Indígenas (CIIDPI) promotes www.INKARRI-NET, which gives communication, information and documentation support.

c. By the geographical location of the creators:

1. *Sites produced regionally.* For example, www.geocities.com/mapu.cl of the 7th Region, Bio-Bio - Chile provides information about the history and culture of the Mapuche people.
2. *Sites developed outside the sub-continent.* The site www.nativeweb.org was produced in the United States. It represents a non-profit international educational organization and is dedicated to the use of telecommunications to disseminate information from and about indigenous nations, communities and organizations; promote communication between indigenous and non-indigenous communities; research and facilitate the indigenous peoples's use of the ICTs.

d. By the origin of the funding agent:

1. *Self-financed.* In the Universidad de Campinas-Brazil, the web site www.aymaranet.org is produced. It is available in three languages (Aymara, Spanish and English) and is maintained by its creator, an Aymaran professional from Peru, and a group of volunteer collaborators.
2. *With financial support.* The web page www.encuentroindigena.cl of the Coordinadora Nacional Indianista (CONACIN-Organización Multiétnica de Chile) receives support from the Cultural Division, Area of Native Cultures of the Ministry of Education, Government of Chile, which has the web site www.serindigena.cl, available in five languages: Mapudungun, Rapa Nui, Aymara, Spanish and English.

e. By the language used on the web site:

1. *One language.* www.werkenkvrvf/noticiasdelwallmapu is a site that provides information about the situation of the Mapuches in Argentina, courses of action, declarations, their organization and relation with the national society. The site is in Spanish and Spanish translations accompany some words and expressions (greetings, names of the native authority figures) given in Mapudungun.
2. *Two or more languages.* The web site of the Fondo para el Desarrollo de los Pueblos Indígenas de América Latina y el Caribe, www.fondoindigena.org, offers information about forums, meetings, regional and international indigenous organizations, agencies for employment opportunities and cooperation. It

includes an agenda of indigenous events, a bulletin, documents, publications and a chat, a messenger service with simultaneous translation into six languages (multilingual web). It is sponsored by the Latin Union of France and the Instituto Neotec de la Paz, Bolivia. The site www.quechuanetwork.org is dedicated to the development of telecommunications in the Andean area and can be accessed in four languages: Quechua, Spanish, English and French.

f. By main interests or subject matter:

1. *Indigenous politics.* There are numerous cases of the Mapuches of Chile and Argentina's use of the ICTs, even though they disseminate manifestations of the native culture, emphasizing proposals for autonomy and the set of problems relative to the conflicts they have with the national states and the private companies involved in the extraction of wood, petroleum, gas and other forms of exploitation developed in their ancestral lands. In some cases, these sites are self-financed by the members and collaborators, while others operate in agreements with national and international academic institutions, such as the Liceo Talcahuano, Chile and the Department of Sociology at the University of Uppsala, Sweden: www.conflictomapuche.8k.com
www.geocities.com/mapucl/pagina.htm <http://membersaol.com/mapulink-3em-dugun-02.html>
<http://linux.soc.uu.se/mapuche/> www.mapuche.cl
www.geocities.com/aukawel/ruka/chillka/presentation.html
2. *Culture and Education.* The page Tupak Katari of the web site <http://home.swipnet.se/valencia> is dedicated to the dissemination of the cosmovision, history, poetry, symbolism, festivities, etc. of the Andean world.
3. *Ecology, Sustainable Development.* The web site <http://dobboyala.org>, created by indigenous professionals from Panama in charge of Environmental Education and Indigenous Development programs, is based on the strengthening of the traditional social structures and the search for independent economic alternatives.
4. *Commerce and micro-enterprise activities.* The web site of the Centro para el Desarrollo Indígena de Costa (CEDIN), www.cedin.iwarp.org, sponsored by the Canada Fund for Local Initiatives, of the Canadian International Development Agency, is primarily intended to stimulate commercial activity based on sustainable development and an active role of small, individual businesses and the local organizations of the southern region of the country. Another application within the micro-enterprise area is that of the web sites dedicated to electronic commerce, which offer artistic products without intermediation. Some examples of this type of use of the Internet are found in the Guatemalan organization Samajel B'atz and the Fundación de Artistas e Intelectuales Colombianos de los Pueblos Indígenas.

This initial overview only attempts to show some examples of the various uses of the ICTs by indigenous peoples. It also highlights the importance of intensifying the studies aimed at providing a broader and more precise panorama of the modes that indigenous involvement in the ICTs have acquired as well as perspectives to increase their participation in the information society.

D. The path to involvement in the information society: opportunities and challenges

In an analysis of the challenges that the native population faces regarding its involvement in the emerging paradigm of the information society, some central convergent aspects can be seen that result in their marginalization from the new technologies, concerning the rationalities and processes of the two different cultural worlds: global society and indigenous society.

The strong root of cultural prejudice, which has already been indicated, carries particular significance when it exists in the key decision-making sectors within national societies. There are

also aspects directly related to the information paradigm that influence and stimulate indigenous marginalization. In the first place, the same mode of expansion acquired by the ICTs shows that it is oriented according to market logic; this differs substantially from the cosmovision, which, though affected by the colonial process, still gives some meaning to the daily life of many of the indigenous communities of the Region. Concomitantly, the hegemony of technological production, concentrated in a small nucleus of industrialized countries and the predominance of the English language in the ICTs arena add barriers to the process of involvement of the indigenous communities.

The elevated costs of technological infrastructure in the indigenous areas are associated with the geographical isolation of the rural communities and the lack and/or deficiencies of basic infrastructure services. The absence of regulatory legal frameworks that facilitate funding opportunities is clear when the indigenous applicants lack titles of individual ownership of their plots of land. Also, the high levels of technological obsolescence impose a fast rhythm of replacement that is far from the few opportunities for access to credit of a sector characterized by its weak economic base, while the rate of change impedes the community decision making processes. However, the central aspect of this tension might be related to the gap between the cultural conception of time and space of the indigenous society and the global society.

Within the indigenous society, in addition to the aforementioned intra-community processes that impede their information involvement (see part b), the blunt presence of illiteracy becomes a central obstacle that must quickly be overcome in order to democratize access to the ICTs. As Hilbert and Katz (2002) express, "the lack of education could be a crucial factor in the expansion of the digital divide. In debates on this issue, the fact that illiteracy is one of the fundamental barriers to participation in the information society tends to be avoided"²⁴. However, one should remember that a person's illiteracy carries multiple capacities, the product of his life experiences and the transmission of knowledge through oral tradition.

However, even in the case of the indigenous peoples who have managed to achieve access to adequate educational levels, it is likely that this sector will also remain excluded from the information society. Control of the written code on the part of the potential users is a necessary, but insufficient, condition to stimulate the appropriation of the new technologies, promote information technology proficiency and the reduction of the digital divide. This observation highlights the importance attributed to the reduction of the cultural distance and the increase in the capacity of the ICTs to engage the users to participate in linguistic and cultural contents; in this way, they can achieve an effective communication with other indigenous beneficiaries and support a more detailed study of their organizational processes²⁵. Access to information organized according to the interests and needs of the indigenous users could contribute to a reduction in the levels of distrust of the communities and their forms of leadership, with respect to the possible disruptive impact of the ICTs in the cultural and social guidelines of the native communities.

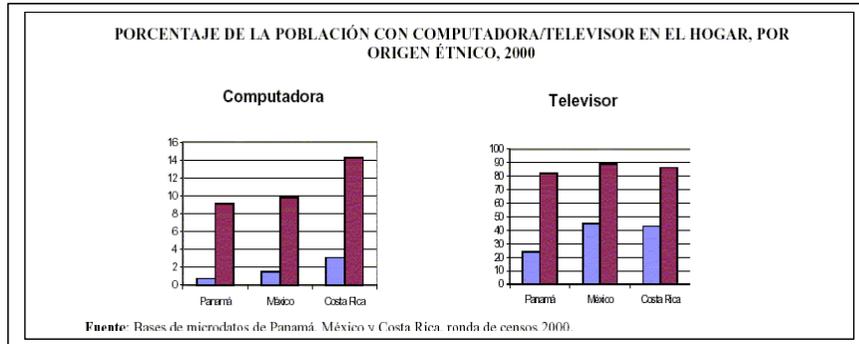
A recent analysis of ECLAC²⁶ states, "one's ethnic group is another factor of the digital divide in Latin America and the Caribbean. The probability of having a computer in one's home is five times greater in the whole of the non-indigenous population than in the homes of indigenous peoples. The probability of having a television is two times higher". The fact that nearly 70% of Latin American homes have televisions offers a false image of democratization and mass access to consumption. However, the process of universalizing formal citizenship has not improved social participation and the political systems maintain a precarious stability.

24 "In addition to income, the digital divide is reflected in many other socioeconomic, demographic and geographical characteristics. One of the most evident correlations is that between the ICTs and the educational level". Hilbert and Katz (2002).

25 Also, one should emphasize the importance of focusing not only on the content of the messages, but, also, on the overlap of their meanings with the vehicle and the beneficiaries.

26 "Los caminos hacia una sociedad de la información en América Latina y el Caribe", Preliminary Regional Ministerial Conference of Latin America and the Caribbean for the World Summit on the Information Society (2001).

Rural illiteracy clearly contrasts with urban consumption via the Internet. While infra-human conditions multiply, only a few kilometers from the indigenous communities, wealth, consumption and technological development exceed capacity of united social organization and, often, the governing of our societies. The sensitivity and daily creative capacity of the residents of the large capitals diminishes or disappears before an often inefficient or uncontrolled use of the Internet through domestic connections.



Note: Still there are not other disintegrated National Census data by ethnic groups that, at the same time, that includes questions about people who have got and use the ICT.

Despite the discouraging data of reality, the scenario of indigenous involvement in the information society also presents opportunities that are stimulated by the indigenous movement as well as by the international community's realization about the role of the native communities for the sustainability of world development. In the last ten years, it has been observed that the indigenous movement has multiplied its course of action and increased its presence in the international forums. It has also increased the consideration of important sectors of the global society regarding its demands and vindications; these processes have given rise to new reflections and conceptualizations on the subject.

From the beginning of inter-ethnic contact, the indigenous peoples developed new survival strategies. Depending on the degree of vitality of the native culture, some strategies tend to the appropriation and assignment of new meaning to those cultural goods produced by the hegemonic society that favor the organizational processes of the communities. There are numerous historical examples, such as the appropriation of the horse or the military tactics of the colonizers, as well as current practices that articulate central aspects of their cosmovision with knowledge from the global society. Such is the case of the complementation of the Andean health system with the proposals of western medicine or the adoption of the new production technologies along with the revaluation of the agro-ecological principles of the American communities. These practices, which associate and interweave different worlds and often opposing conceptions, constitute undeniably intercultural strengths of the indigenous peoples, which facilitate their interaction with the new information paradigm.

The process of ethnic uprising, which has taken place throughout the sub-continent since the 1970s, multiplies the instances of autonomous community organization and stimulates new stages of ethnic awareness that exceed the old, hidden mechanisms of self-destructive resistance. These transformations are mobilizing processes for the revitalization and acceptance of one's identity, which, in many cases, have a positive impact on the transitional internal conflicts and favor a gradual increase in the cohesion of the indigenous groups in order to define and put into effect strategic political projects with a strong cultural base.

Without a doubt, the growing number of indigenous peoples moving to urban environments, one of the most significant changes of recent times, as well as access to formal education, greater participation of women and the practices of political, cultural, communication and information self-management represent opportunities for participation in the ICTs; they are open with respect to the experience accumulated and the lessons learned, which are already

showing supportive results for the indigenous stakeholders (see part c). Also, the established capacity in human and technical resources, which emerges from the process of indigenous appropriation of the new technologies, serves as a basic platform to increase their participation, help the new users come closer to the ICTs and stimulate the consolidation of the existing social capital.

Among the possibilities in the indigenous social arena, there have also been advances in the basic education of children. Technology has gradually been incorporated in rural zones in order to promote computer literacy. This process, in turn, has awakened interest and motivation of the adults to participate in the proposals for involvement.

Also, one hopes that constant technological advancement will contribute to a progressive reduction in costs, which would facilitate becoming connected at prices accessible in a framework of social and economic rationality. The development of new designs²⁷ also generates expectations about the effective positions of the ICTs as a “bridge” with the spoken word and transmitter of knowledge, contributing in its own way to the reduction of the digital divide.

Finally, it is of great importance to point out that the **presence of the indigenous communities in the information systems represents an opportunity for the global society**, in terms of the possibility of getting to know the indigenous cultures better and enrich one’s life with the contributions of the knowledge of other ancient communities: cosmovision, philosophy, spirituality, scientific and technical knowledge, social relations and relations with nature, etc., which could contribute to forming a more integrated conception of the human condition. At the same time, the diffusion of indigenous cultural values stimulates the destruction of the image currently transmitted in information technology; it generally refers to negative aspects (extreme poverty, illiteracy, malnutrition, etc.) or emphasizes native “picturesque/folklore” aspects.

E. Proposals for indigenous incorporation

After analyzing the social and economic tendencies for Latin America and the Caribbean, it is difficult to imagine, in practice, future scenarios of prosperous and equitable development, with environmental sustainability, and respectful of the identity and culture of the indigenous peoples. As ECLAC expressed (2002), “the utilization of the digitalization process to celebrate linguistic and cultural diversity does not automatically imply a full integration in the global economy. Also, use of the ICTs to foster economic growth does not include the simultaneous strengthening of democratic participation; enjoying the cultural goods, art and entertainment does not automatically improve the health of the members of society and so on”.

In a context that stimulates social fragmentation, the proposals supporting a democratic participation in the information society reclaims strategies that encourage advances towards more united forms of relating and redefining a more inclusive “we”. Therefore, it is necessary to visualize proposals for innovation and social policies that are reparative to the guidelines of the current economic model. We believe that this is possible because, despite the clear global tendencies of cultural homogenization, indigenous efforts to overcome this challenge are continually arising in various Latin American contexts. There are many strategies in this area, which come from the communities that have achieved the greatest levels of community cohesion and representation, direct and legitimate, in second- and third-tier organizations. In some cases, the political society and non-indigenous civil society start to support these processes, generally at the local level.

The governments of the Region, the formers of public opinion, the political system and broad sectors of civil society, continue to express their worries and the need to combat the negative consequences of the indigenous exclusion, within the framework of a *discourse of respect* for

²⁷ Such as the prototypes of the cordless interfaces at low costs and capable of transmitting broadband; for example, Simputer and others.

ethnic identities and cultural idiosyncrasies. Also, the International Community recognizes that a most efficient course of action is necessary to reverse the information marginalization of the native people²⁸.

However, in terms of public policies, a consensus has not been reached, which is necessary to act in an integral and coordinated form. Such a consensus would unite governmental forces of the international community and the civil society associations, in order to stimulate the so-called “digital opportunity”. A long work experience with indigenous issues shows the good and bad practices²⁹ that indicate the need to join forces and coordinate actions to avoid an overlap of resources, the breakdown of interventions and their counter-productive effects.

In this sense, the current **Virtual Workshop on Indigenous Involvement in the ICTS** is a relevant space for the constructive discussion and exchange between the participants in order to advance the development of the conceptual bases of a framework for action that facilitates indigenous access to the ICTs as a vehicle of social transformation. The current document is proposed as a preliminary motivational reflection of the debate of the Virtual Workshop as an open space to combine proposals and strategies in the different levels required for an integrated action which, at the same time, has the greatest diversity of criteria, cultural perspectives and experiences.

We believe that the sum of contributions, lead by the indigenous organizations or in coordination with them, depending on the various national contexts, could lead to the implementation of a series of proposals articulated in a ***Regional Strategy for the Reduction of the Information Marginalization of the Indigenous Communities***. Following the experiences carried out by ECLAC with numerous indigenous communities of the continent, we will work with certain aspects that are particularly relevant, without ceasing to emphasize the following considerations: in the first place, the importance of the active role of the indigenous groups in the process of developing a conceptual-organizational framework that features strategies and opens a path to stimulate the reduction of the digital divide. Secondly, the strategy is conceived as part of a design of medium- and long-range public policies, intended to facilitate the movement of the native communities towards involvement in the digitalization process; this would minimize the serious risks of remaining marginal to the information society in the modern world³⁰. Finally, although far from a universal proposal, the specifications described only attempt to contribute to the social effort to dissolve the prejudice existing in the non-indigenous society and promote actions to improve the quality of life of the native communities.

In a first approach, the Regional Strategy is seen as integrating different areas of action and diverse stages or phases of their own duration, which are sometimes simultaneous or complementary, depending on the economic, political and socio-cultural characteristics of each indigenous community and national or sub-regional context:

- a. **Revitalization of the ethnic and cultural identity of the indigenous peoples:** the national societies and their public policies can contribute to this process, opening spaces the promote the development of the ethnic organizations as social contributors to of their own economic, social, cultural and information development. The process of ethnic uprising is a key aspect to stimulate the capacity for individuals and communities to appropriate the new technologies.

28 “The existence of threats as well as opportunities in the transition towards an information society emphasizes the need to create public policies that guide the process towards the anticipated result. This result will eventually arise from the political decision-making process”. (ECLAC, 2003).

29 See: PRAIA, 2002.

30 “The countries that manage to become members of the global information society will have real and promissory opportunities before them. Perhaps there has not a previous occasion in history, given the magnitude of the paradigmatic change that one faces, the range of opportunities and the degree of awareness that the countries have, which they could take advantage of in this occasion to reap the fruits of change. However, it is also possible that throughout the course of history, there has not been a window of opportunity for progress, which is on the point of closing quickly. The risk of losing this opportunity carries enormous costs for future generations” (ECLAC, 2002).

- b. **Definition of a communication policy of significant impact, aimed at the reduction of ethnic discrimination and the digital divide:** the prejudiced behavior and intolerant ideas are expressed daily in the broadest forms of communication, where those who form opinion recreate archaic prototypes of interpretation of the intercultural relations and their routine occurrence. Therefore, this phase opens a long and difficult process of transformation that highlights the social values point of view of the non-indigenous population. This will only be accomplished while there exists, on the part of the political class and civil society together, a commitment to pluralism and the vocation to share, without exception, the benefits of access to the information society.
- c. **Revision of the rash defense mechanisms of the values and behavior of the people historically discriminated against:** like all social organizations, the indigenous communities have customs, beliefs, and ways of life that affect their daily actions and which do not necessarily benefit their survival, nor should they be accepted or vindicated solely by virtue of their belonging to those cultures. It will be necessary to encourage multiple and continual instances of self-criticism, lead by the indigenous organizations and communities, in constant dialogue, negotiation or consensus with the non-indigenous civil society, above all, at the local level. The intercultural approach and unprejudiced reflection process about the potentialities of the ICTs to promote local development can contribute to the acceptance and recognition of the advantages of their incorporation in the daily lives of members of the indigenous population.
- d. **Self-affirmation of the ethnic identity and distinct cultural of the indigenous peoples, in a scenario of self-management:** this involves the design of new public policies, at local and central levels, which are expressed in the implementation of social, communication and information programs, specifically managed by those interested. These programs are oriented towards generalizing an equitable cultural co-existence, with equality of opportunities for participation in the paradigm of the information society.

The principal guidelines for the implementation of these strategic aspects include the following:

1. Opening multiple spaces of dialogue and debate about the modes transition towards involvement in the information society, between the governmental authorities (central and local) and the legitimate indigenous organizations (in the traditional route or through direct representation). These spaces of settlement will be based on the respect for community organization and the cultural manifestations of the indigenous peoples;
2. Design of consensual policies and actions that correspond to concrete means of reduction of the social phenomenon of information exclusion;
3. Emphasis on two basic principals that guide the spirit of the social programs to conceive and implement: the principle of **self-determination** so that a community can play an active role in its own development and the principle of **self-management** as an instrument to learn the concrete tasks that require the gradual incorporation of the population and the indigenous communities into the digitalization process.
4. The development, in collaboration with the interested groups, of a **Specific Program for Indigenous Access to the New Information and Communication Technologies**, associated with the demands of the communities themselves (civil and human rights, electronic municipal government, environmental protection, production, bilingual and intercultural autonomous education, integral health, etc.) and coordinated, at local and decentralized levels, with the politics of economic development and basic infrastructure (electricity, telephones, a road network, etc.). This articulation, in the indigenous areas, will promote courses of action that balance the current disadvantageous situation and stimulate the construction of a demand and the creation of local initiatives for involvement in the ICTs.

Emphasizing the fact that the definition of such courses of action will be one of the results of the participation of the native populations, we espouse the continuation of some of the central points to be involved in a Program for Indigenous Access to the ICTs. The final design of this program will result from integral diagnostics carried out with the active participation of the indigenous communities, respectful of their social, cultural and economic structures.

SPECIFIC PROGRAM FOR INDIGENOUS ACCESS TO THE ICTs

- Incorporation of the minimal conditions of basic infrastructure in the most neglected rural zones and improvement of the existing infrastructure in the entire indigenous settlement area. This should occur in a way that facilitates access to the new users in a number that can become significant for the national figures, above all, in countries such as Guatemala, Ecuador, Bolivia or Peru;
 - Reduction of illiteracy and increase in the educational level of the whole of the native population, especially the women;
 - Promotion of attitudes favorable for the incorporation of the ICTs, among the leaders as well as the population;
 - Emphasis on the transformation in the basic education of girls and boys: incorporation of bilingual education programs (with agents, modes of transmission of knowledge and their own cultural contents) and, in particular, stimulating movement from the traditional pedagogical paradigm towards the proposals of critical pedagogy. This will promote proactive/positive behavior in the children and the development of cognitive frameworks conducive to the use the ICTs;
 - Stimulation of the mode of shared access to the ICTs through telecenters in rural and peripheral-urban areas;
 - Official recognition, normalization and dissemination of the writing of the indigenous languages, in order to open intercultural information spaces. In such spaces, each indigenous community can express itself in its own linguistic code, which will encourage the production of a non-traditional space for the native languages;
 - Identification and training of grassroots, rural and marginal-urban indigenous organizations, which are capable of self-managing community micro-enterprises that involved in the information society;
 - Self-identification of local practices that benefit from the use of the ICTs and, in turn, promote their incorporation;
 - Stimulus of the self-management of the new technologies and the production of contents; fostering of the process of appropriation and training of the indigenous users;
 - The preparation of supervision and control (local and community), which will guarantee the effectiveness of the coordination mechanisms, control the administration of the information resources and supervise their equitable distribution at the community level;
 - The opening of sources of work based on the new resources and skills available in the communities;
5. Development of research on the forms of appropriation, access, modes of use, objectives and projections of the current participation of the indigenous groups and individuals in the

information society, focusing in depth on paradigmatic and representative case studies. The design of such participative research, will guide intra-community exploration to decide in which way the ICTs will be incorporated. This will occur on the premise that the indigenous communities can decide to use the ICTs in a different form than other groups of the national societies.

To put these proposals into effect in a gradual but constant manner requires facilitating the necessary conditions so that each of the stakeholders interested in eliminating the information marginalization can assume his role. In the first place, there are the indigenous peoples and their representative organizations. However, there are also the national states, the cooperating organizations, the civil society institutions and the private companies working within the framework of their social responsibility ("corporate social responsibility"); we will all benefit from coexisting in a continent where ones strives towards equitable development with the involvement of the broadest sectors of the citizens in the paradigm of the information society.