

E/C.12/CRI/4  
22 June 2006

ENGLISH  
Original: SPANISH

ECONOMIC AND SOCIAL COUNCIL  
2007 Substantive session

IMPLEMENTATION OF THE INTERNATIONAL COVENANT ON  
ECONOMIC, SOCIAL AND CULTURAL RIGHTS

Fourth periodic reports submitted by States parties  
under articles 16 and 17 of the Covenant

COSTA RICA \* \* \* \* \*  
(Period 1990-2004)

\* The initial report (E/1990/5/Add.3) concerning rights covered by articles 1 to 15 of the Covenant, submitted by the Government of Costa Rica, was considered by the Committee on Economic, Social and Cultural Rights at its fifth session in 1990 (see documents E/C.12/1990/SR.38; E/C.12/1990/SR.40-41; E/C.12/1990/SR.43; E/C.12/1990/8, paras 159-195).

\*\* The information submitted in accordance with the consolidated guidelines concerning the initial part of reports of States parties is contained in the core document (HRI/CORE/1/Add.104).

\*\*\* In accordance with the information transmitted to States parties regarding the processing of their reports, the present document was not formally edited before being sent to the United Nations translation services.

\* \* \*

1082. Article 89 of the Constitution provides that “The cultural aims of the Republic include: to protect its natural beauty, to preserve and develop the historic and artistic wealth of the Nation, and to support private initiative directed to scientific and artistic progress.”

\* \* \*

1085. In the scientific and technological field there are two key institutions: the Ministry of Science and Technology (MICIT) and the Costa Rican Electrical Institute (ICE). There also exists framework legislation, namely the Promotion of Scientific and Technological Development Act, Law No. 7169 of 26 June 1990, which reaffirms the government

backing for supporting and modernizing Costa Rican legal instruments to make science and technology factors for development.

\* \* \*

**Measures adopted to implement the right of everyone to enjoy the benefits of scientific progress**

*Conservation, development and dissemination of science*

*Access to electricity and telecommunications*

1119. Since the provision of electricity is a vital service for national development and something that contributes greatly to the progress of nations, it is essential first to demonstrate what access the inhabitants of the country have to electrical and telecommunications services. These services are provided by the Costa Rican Electrical Institute (ICE), an autonomous institution entrusted with developing productive sources of electrical energy.

TABLE 41

**Costa Rican Electrical Institute**

**Operation of national electricity system, 1990-2003**

<i>Item</i>	<i>1990</i>	<i>2003</i>
Electricity coverage (per cent)	89.97	97.06
National electricity demand (GWh)	3304	7485
Maximum potential demand (MW)	682.30	1253
Installed capacity (MW)	890	1926
Electricity generation (GWh)	3707	7565
Length of transmission lines (Km)	1341	1691
Transformation capacity (MVA)	3282	6626
Length of distribution lines (Km)	15589	27945
Investment (millions of current colones)	8100.3	595505.5

*Source:* Report of the Costa Rican Electrical Institute (ICE) for the DESC report, July 2005.

1120. The electrification of the whole country was a milestone in our national history. Costa Rica is today one of the highest-ranking countries in Latin America for quality of service and degree of coverage. The latter has reached 97.06%, with 1,169,936 customers throughout the country, served by all the electric companies.<sup>181</sup>

1121. It is essential to add that ICE is presenting the installation of solar panels as an alternative means of bringing electricity to remote areas of the country out of reach of the distribution networks, including indigenous territories. By December 2004, 1,233 panels had been installed at a cost of \$1.8 million in rural areas of the country such as the Osa peninsula, Chirripo National Park, Talamanca, Piedras Blancas, Puriscal and Isla Caballo

among others. The installation of mini-power stations is a project that is at the feasibility study stage.

1122. Where the quality of the ICE transmission network is concerned, operational safety criteria are used whereby the inevitable faults that occur should not cause outages or system collapse. The use of operational safety criteria has meant that the system has worked for more than three and a half years without any total breakdown.

1123. The second area of activity for ICE is telecommunications. The chief progress made in implementing business strategies and strategic actions can be seen in three specific programmes: 1. Fixed telephones; 2. Mobile telephones; 3. Advanced internet.

1124. Pursuant to the law which set it up and to its mission, in 1992 ICE updated its development strategy to ensure constant, sustained progress in telecommunications. In 2004, the capacity of operational fixed telephone lines increased by 16% over the previous year, to coverage of 32 telephones per 100 inhabitants. This indicator places Costa Rica among the countries with the highest percentage in Latin America.

1125. In addition, ICE has been working on a project of the greatest importance for the development of its international telecommunications network and thus of the country's economic and social development. Costa Rica has a modern terminal station of the Maya 1 cable, which allows the best and most reliable interconnection with the national ICE network.

1126. In 1995, the public telephone system earned credit by offering the CHIP card public telephone service, whereby international calls could be made by those who had no telephone at home. Important improvements were also made to the system and personalized service was introduced for customers, organizations (both businesses and institutions), working especially with penitentiaries and major tourist ports. The year 1998 began with 2,255 CHIP public telephones and 442 telephones using Colibri 197 virtual cards. The expansion and improvement of these services is continuing.

1127. With regard to mobile telephones, installed capacity at the end of 2004 was 945,000 lines, considerably increasing the quantity of services in operation, which rose to 923,084. The Costa Rican Electrical Institute offers the population coverage of 21.73 mobile services per 100 inhabitants, with its two technologies: GSM and TDMA.<sup>182</sup>

### **Specific measures for the conservation, development and diffusion of science and Technology**

1128. The National Programme of Science and Technology<sup>183</sup> is the instrument for planning scientific and technological development over the short, medium and long term. It ensures continuity and gives protection to the efforts of the public, private and higher education sectors to facilitate scientific research and technological innovation, thus conducting to greater economic and social progress and guaranteeing a better quality of life for Costa Ricans.

1129. The National Programmes of Science and Technology (1990-2004) have fostered and supported the increase in national capacity to absorb and use science and technology, encouraging the transfer of technology and scientific and technological infrastructure, which has increased competitiveness, and assisting the modernization of the public sector to make it more efficient and effective.

1130. The Ministry of Science and Technology (MICIT) participates in and carries out a range of activities to ensure effective access to science and technology for all Costa Ricans. The following are the most important policies and programmes:

- Mobile Classroom Programme, set up in 1999 to democratize knowledge of science and technology and aimed at marginalized communities throughout the country.
- Ibero-American Programme of Science and Technology for Development (CYTED). Among the main achievements are the participation of around 77 Costa Rican research groups, participation in about 50 research networks and projects, 15 publications, the initiation of research workers at the international level, the improvement of national research centres and the training of a large number of research workers and managers. A large number of publications have been issued. The country in general has benefited from the transfer of technology in fields such as aquaculture, fine chemistry, biomass, computer sciences and automation, biodiversity, new materials, alternative energy sources and food technology.
- Programme of National Prizes for Science and Technology, awarded for the best original research
- Programmes to promote science and technology. A series of activities were begun in 1999 to popularize science and technology and to improve their teaching, which joined those already in existence such as the National Centre for Science and Culture, known as the Children's Museum. (Examples are: the National Science Congress for primary and secondary education, a Scientific Essay Competition, the Chemistry Olympics, the Astronomy in the Park Programme, the National Day of Science and Technology and a Portable Planetarium.)
- National Programme of Science and Technology: an instrument for planning scientific and technological development over the short, medium and long term. It ensures continuity and gives protection to the efforts of the public, private and higher education sectors to facilitate scientific research and technological innovation, thus conducing to greater economic and social progress and guaranteeing a better quality of life for Costa Ricans.
- Programme of Science and Technology Fairs (It is estimated that the total number of projects participating in the different institutional fairs is 120,000 and the number of educational institutions 2,400.)
- Regional CORECIT Science and Technology Boards, which constitute a new approach by the Ministry of Science and Technology to supporting regional scientific and technological development. The aim of this programme is to further popularize science, technology and technical skills in a manner specially geared to future generations. (From 1990 to 2004, CORECIT boards

have been set up in the following regions: Central Pacific, Huetar Atlantic, Chorotega and Brunca. These boards provide training, define projects and hold negotiating rounds.)

- Incentives Commission, whose purpose is to give financial backing to the plans, programmes and projects developed in pursuit of scientific and technological objectives and policies, mainly in biology, materials and information technology.<sup>184</sup>

In 2001, with resources from the Incentives Fund for scientific and technological development 27 partial post-graduate grants were awarded for 17 doctorates and 10 master's degrees in different fields such as animal sciences, communications, industrial engineering, after-harvest technology, waste water treatment, species conservation and management, materials sciences, mathematics, organic physics and chemistry, structural engineering, marine sciences, biodiversity and electrical engineering. The studies took place in Costa Rica, the United States of America, Canada, Hungary, Spain, France, Brazil, the Republic of China (Taiwan), Mexico, Switzerland and Germany. A total of 8 research projects with national impact received complementary financing amounting to 23.7 million colones during this period, some of the most significant being related to the improvement of biotechnology, biodiversity, information technology and the development of environmental studies.

- The Pro PYME Fund, which is a transfer made by the Government to the Ministry of Science and Technology budget for the provision of additional economic assistance to meet the technological requirements of small and medium-sized enterprises.
- Technology Encounters for Productive Sectors, which are a means whereby a significant number of businesses and producers are physically brought together for purposes of exchange with the country's public and private technological research and development centres, thus furthermore enhancing human resources training.
- Within the National System of Science and Technology, the Atomic Energy Commission (CEA) has given impetus to the Peaceful Atomic Revolution. Thus, in 2004, the National and Regional Technical Co-operation Programme continued to receive support through the Commission in such areas as agriculture, health, physics and nuclear instrumentation, the environment, geothermal science, human resources, nuclear information and industry to bring about change through the peaceful use of nuclear energy.
- The creation of the National Subsystem of Scientific Indicators and the Technical Commission of Scientific and Technological Indicators had as its main aim to encourage the systemic work of the institutions and organizations that elaborate Costa Rica's different scientific and technological indicators and to recommend policies for the development of indicators in this field.
- System of Science Colleges.

Information and Communications Technologies (e.g. Educational Computer Programme) (Educational Computer Programme : 276,114 students benefited (primary)).

[www.costarricense.cr](http://www.costarricense.cr): State-owned port created during the administration of Dr. Miguel Angel Rodriguez (1998-2002)

- 350,000 postal accounts
- Port with most national traffic. 600,000 hits per month.
- Linked with civil register data bases
- Free reception of personal pages

Action taken: Board of the National Advanced Research Network (CR2Net). Executive Decree No. 1531-MICIT

Advanced Strategic Internet Action and IP Network Project: 82,750 DSL ports have been allocated for households and small and medium-sized enterprises and 1,735 (high capacity) SHDSL ports for the business sector. The internet band width has doubled to 100 Mbps.

1131. The following are some of the activities undertaken:

- Access Programme: the goal of this programme is to make at least 100,000 computers with internet access available to the national population.
- First Worldwide Campaign for Security on the Web: data from the Panda Software company show that 600 new computer viruses are created every month, with the threat of further growth. Faced with this problem, the Association of Internet Users and Panda Software, with the support of the Ministry of Science and Technology, launched, at a local level, the First Worldwide Campaign for Security on the Web, with the slogan “Ridding the world of viruses”. The campaign began on 17 June 2004 and ran for two months. It aimed to give internet users free information and solutions by installing an antivirus that can be downloaded free from the web.
- Computer Security Campaign: “Costa Rica free of viruses”. The Ministry of Science and Technology, in association with Microsoft and McAfee and with the sponsorship of other private and public institutions, launched this campaign on 8 November 2004 to run for two weeks.

In addition, important actions have been taken, such as:

- A marketing study of telecommunications tariffs
- The LANIC Assembly
- A meeting of Advanced Research Networks
- A debate on open and proprietary techniques
- A prize for the best ports and web pages.

Digital government (encouraging the use of information technology in the work of the Government in communication with the civil society).

Action taken: to translate this into reality, an inter-institutional group for electronic government was set up to supervise the establishment of information services.

***Preservation of the natural heritage***

1132. Since 1994, solutions have been devised for better management of natural resources, mechanisms such as the National System of Sustainable Development (SINADES) which, under the 1994-1998 administration, attempted to consolidate a sectoral planning system with regional ramifications for sustainable development. That initiative did not, however, succeed. In 2001- 2002, the Costa Rican Strategy for Sustainability (ECOSOS) was elaborated, but shared the same fate. In 2004, a process was begun to develop a National Environmental Strategy (ENA), which is based on an examination of the range of environment problems, correct solutions to them and mistakes made, and of public environmental management properly so called, within a conceptual framework that will guarantee viability in execution.<sup>185</sup>

1133. We have also begun the elaboration of a National System of Environmental Information (SINIA), which will permit the identification of the necessary variables and indicators to guarantee adequate monitoring of national policy objectives and their impact on resources.

1134. In 1996, a new forestry law was adopted (No. 575) providing for an Environmental Services Payment (ESP) which has replaced all existing incentives. This new scheme is inspired by a comprehensive view of the forest and all it provides, not merely limited to timber. Furthermore, it expands the institutional framework underpinning forestry, both with regard to tree planting and to natural forest management. In particular, it has set up in the private sector the National Forest Bureau and, as a public sector body, the National Fund for Forestry Finance.

1135. Costa Rica also has a National System of Conservation Areas (SINAC), whose financial, social and environmental sustainability the State must ensure, as well as increasing industrial timber production to meet national demand, evaluating and including the costs of forest-derived environmental services in national catchment areas (water production), eliminating illegal logging (13% takes place in wooded areas) and increasing the ecological quality of the present and future forest cover. The System of Protected Areas (SAP) comprises half the country's forest cover, which is around 45%, and 60% of the wetland ecosystems, which represent 7% of the national territory (Ministry of the Environment and Energy (MINAE-SINAC))

TABLE 42

**Protected wooded areas in Costa Rica, 2000**

<i>Management category</i>	<i>No.</i>	<i>Area (ha.)</i>	<i>Area (km<sup>2</sup>)</i>	<i>Per cent of country</i>
National parks	33	626 322	6 236.22	12.26
Protector zones	8	21 429	214.29	0.42
Protection zones	31	157 128	1 571.28	3.07

Forest reserves	11	217 730	2 177.30	4.26
Woodland wildlife refuges	49	174 971	1 749.71	3.42
Wetlands including mangroves	14	92 495	924.95	1.81
National monument	1	232 000	2.32	0.0045
Absolute national reserves	2	1 329	13.29	0.0260
Other areas (estates and experimental stations)	9	15 668	156.68	0.3066
<b>TOTAL</b>	<b>147</b>	<b>1 307 304</b>	<b>13 073.04</b>	<b>25.56</b>

*Source:* National Strategy for Conservation and Sustainable Use of Biodiversity, 2000.

1136. At present about 25% of the national territory is under some category of management, which is a high percentage viewed globally, since only 14 countries in the world have more than 23% of their territory protected by some form of management; in Latin America only Panama, Belize, Venezuela and Ecuador have also achieved as much (Obando, 2002).

1137. However, it must be pointed out that while in the 1970s, 524,467 hectares were added to the system of protected areas, in the next decade, the 1980s, it was 436,539 hectares; in the 1990s, 157,058; and in the period 2001-2004, only 5,052 hectares (State of the Nation project, 2004). It is important to mention that there is a two-nation park (Costa Rica-Panama), called La Amistad, the park with the largest surface area in the country, occupying 199,147 hectares or 4% of the national territory (MINAE-SINAC, 2003).

1138. In the mid-1990s, the GRUAS project reviewed the aims of creating protected areas and the representative function of the ecosystems within them and suggestions were made regarding the areas themselves, as well as the biological corridors needed to connect them one with another.

1139. In the 1990s, two biosphere reserves were declared, three World Heritage Sites and 11 Ramsar sites or wetlands of international importance (MINAE-SINAC, 2003).

1140. It is also important to note the trend towards reconsideration of the management category of certain protected woodland areas (ASP) rather than the creation of new areas. By this means, there has been an increase in the percentage of land under absolute protection (12.6% of the national total) vis-à-vis land where some exploitation is allowed, above all as a result of a change in category for existing ASP (Carara, Macizo Tapanti-Cerro de la Muerte). This is of particular importance, since for all the lands declared as protected in the public domain to become Stateowned, the private lands expropriated within national parks and biological reserves would have to be paid for in full (some US\$55 million – MINAE-SINAC, 2003).

1141. Finally, since the mid-1990s, the State's efforts have been complemented by a tendency to seek new forms of conservation that endeavour to guarantee the viability of ASP, the mobility of species and an ecologically healthy biodiversity by connecting up the ASP either through other ASP or through biological corridors. These efforts are matched by the creation of more than 100 private reserves, which together cover 1% of the national territory and whose activities are co-ordinated by the Network of Private Nature Reserves (MINAE-SINAC, 2003a). Ecotourism, an important source of income

for the country, has here also played a key role in the preservation of woodlands, both public and private.

1142. In recent years, efforts have also been made to protect stretches of sea-coast to enhance the protection of coastal species and ecosystems; however, this is a field in which much remains to be done in our country. More accurate measurements of these areas are being sought, but they are estimated at about 328,256 hectares.

1143. Since 1996, with the enactment of the Forestry Law, it is strictly forbidden to cut down mangroves. Over the previous 20 years there had been significant degradation of wetlands as a result either of the practice of drying mangrove swamps to fill them in and construct dikes or other infrastructure for tourism, or of deforestation to create shrimp ponds.

1144. With the aim of improving the general management of marine and coastal resources, the idea was conceived of giving priority to human resources in all action taken, which would involve enhancing and applying the concept of resource conservation. Two of the actions that would have to be taken in that regard are strengthening the organization of fisheries, so as to achieve adequate participation in planning, discussion and decision-making; and obtaining and facilitating access to financial resources and encouraging greater participation by local governments.

1145. According to the ecosystems map of the World Bank and CCAD 2000, Costa Rica is the country with the highest proportion of its territory devoted to agro-ecosystems in Central America: 70%. Another 27% of the territory is forest cover (including mangrove swamps); it is the most deforested country in the isthmus after El Salvador. Evergreen forests form 92% of the forest cover, with 2% being deciduous or semi-deciduous. Of the 13-14 million species believed to exist in the world, it is estimated that Costa Rica has 4%; there are 9,000 species identified (a little over 5% of all the known species in the world). The best known groups are plants and vertebrates (amphibians, reptiles, birds, mammals and fish) which represent between 83% and 80% respectively of the estimated total of species. About 1.5% of our species are endemic, which places Costa Rica in the category of moderate endemism. About 2% of the known species are endangered or under threat of extinction; among them, it is estimated that all species of freshwater fish (135) are endangered to a greater or lesser degree (ENA, 2004).

1146. Among the chief threats to biodiversity is the degradation of ecosystems due to deforestation, overexploitation for agricultural purposes and use of resources, creeping agriculturalization and pollution of waters, the introduction of exotic species, hunting and illegal extraction. However, our institutional capacity is insufficient to monitor and control the impact of social and productive activities in conservation areas or for the enforcement of existing law. Serious problems persist in the supervision and control of the environment because of the demand for concessions of property in the public domain coupled with insufficient institutional resources. As a result of the political and administrative centralization of the country, conservation and sustainable use are not sufficiently integrated into national, regional and local decision-making processes. In

particular, municipalities have no great involvement in the protection and management of biological diversity.

1147. It is of the greatest importance to highlight ICE's environmental management. The Institute has since its inception been committed to the protection and conservation of natural resources. It must be said that 98% of the electrical energy produced in the country comes from renewable sources, namely hydroelectric, geothermic or wind power, and only 2% is produced from fossil fuels. For that reason, ICE has collaborated in the protection of water resources in several ways: through the protection of priority zones, reforestation and the management of catchment areas.

1148. Since the quality of water resources for the production of electricity is directly dependent on the conservation and rehabilitation of the forest cover in catchment areas where water power can be generated, the first action taken by ICE was to ensure the creation of the forest reserves of Rio Macho and Arenal.

1149. The Institute has also encouraged the restoration of natural resources by reforestation and so it has forest nurseries in the areas of Cachi, La Garita and Tilaran, as well as other nurseries located and administered by various electricity-generating projects under construction. By 1997, ICE had grown about 7 million trees, of which approximately 5 million had actually been planted out. From 1995 on, reforestation was carried out using trees purchased from nurseries developed by communal organizations in their respective districts. This proved very effective and in the period 1996-1998 alone 1,830,535 trees were planted in the different river basins concerned, such as those of the Chiquito (Arenal), Sarapiquí (Toro), Reventazon, Térraba, Pacuare, Parrita and Grande de Tarcoles.

1150. The Electrical Institute has also involved itself in the efficient administration of water resources,<sup>186</sup> with the aim of ensuring the quality and quantity of those resources and has implemented energy-conservation programmes as a fundamental component of a sustainable development strategy.

\* \* \*

### **Protection of freedom for scientific research and creative work**

1161. By the actions described in the section on the promotion of culture, the Ministry of Culture supports initiatives and works specifically to foster all forms of cultural expression especially among the youth. Nevertheless, the Ministry is still working on ways and means for more effective inclusion of some population groups, such as indigenous peoples.

TABLE 43

**Financing provided by the Incentives Fund to scientific and technological research projects, 2005**

<i>Research project</i>	<i>Area of specialization</i>	<i>Amount approved (colones)</i>
“Genetic variation in a captive population of red limpets ( <i>Ara macao</i> ) and its implications for the conservation of the species in Costa Rica”	Conservation of red limpets in Costa Rica	1 342 000 00
“Delineation of a new virus affecting citrus fruits in Costa Rica”	Agriculture	352 000 00
“Use of organic fertiliser to control disease”	Agronomy	4 000 000 00
“Metabolic analysis of the consequences of abiotic stress in <i>Tagetes foetidissima</i> ”	Natural products	3 000 000 00
“Advanced structural characterisation of nano-structures and surfaces”	Materials science and engineering	10 967 000 00
“Tree germination and initial development in Costa Rica’s dry forest”	Biology	4 400 000 00
“Search for <i>Xylella fastidiosa</i> in commercial plantations of citrus fruits in the north of the country”	Cellular and molecular biology	500 000 00
Health Research Institute (INISA), Human Genetics Section	Health	2 458 530 00
<b>TOTAL AMOUNT</b>		<b>27 019 530 00</b>

*Source:* MICIT, 2005

1162. The Incentives Fund for Scientific and Technological Development exists for the protection of freedom for scientific research and creative activity. It supports research and creative work in this field and in 2001 allocated from its resources 27 partial post-graduate grants, 17 for doctorates and 10 for master’s degrees in different fields such as animal sciences, communications, industrial engineering, after-harvest technology, waste water treatment, species conservation and management, materials sciences, mathematics, organic physics and chemistry, structural engineering, marine sciences, biodiversity and electrical engineering. The studies took place in Costa Rica, the United States of America, Canada, Hungary, Spain, France, Brazil, the Republic of China (Taiwan), Mexico, Switzerland and Germany.

1163. A total of 8 research projects with national impact received complementary financing amounting to 23.7 million colones during this period, some of the most significant being related to the improvement of biotechnology, biodiversity, information technology and the development of environmental studies.

### **New measures adopted**

1164. Using an inter-institutional approach, policies and programmes have been adopted in the national education system to promote the conservation, development and diffusion of science and culture. Examples are:

- Creative music and plastic arts festivals
- National Innovation Project
- Chemistry, mathematics, English and physics Olympics
- Oratory and essay competitions
- Student games
- RUTA Quetzal
- National Geography Competition
- Forming moral values
- Environmental education

1165. In the field of the conservation, development and dissemination of science and culture, it should be noted, among other achievements, that the National Archives System Act<sup>190</sup> provides that documents of scientific or cultural value form part of the scientific and cultural heritage of the State, which therefore has an obligation to preserve and protect them.

### **Conclusions**

1166. It is clear that the State is determined faithfully to implement the right of every person to participate in cultural life; to enjoy the benefits of scientific progress and its applications; and to be assured of protection for the moral and material interests deriving from the scientific, literary or artistic works of which he or she is the author. Hence there are several different entities that work specifically to that end, which in absolute terms is not yet fully achieved.

1167. A first feature to be highlighted is the great progress that has been made in the cultural field in promoting and developing mechanisms and actions to regionalize cultural activities, through both the regional directorates and the creation of houses of culture in various cantons. In this way, we aim to cover the whole national territory and spread cultural activities in response to the needs and particular situations of each geographical area, with attention paid to social circumstances.

1168. Nevertheless, the scarcity of economic resources available to the cultural sector as a result of budget allocation by the Government is an obstacle here and the sector therefore has difficulty in ensuring continuity in the activities it undertakes.

1169. With regard to access to scientific and technological progress, there have been great achievements and important efforts have continued, as a result of which it has been possible to enable a vast proportion of the country's inhabitants to enjoy the benefits of electricity and telecommunications. It is, however, necessary to work constantly to improve the quality of such access.

1170. The State evidently desires to encourage scientific research, as can be seen from the incentives it provides and the activities undertaken to that end. International co-

operation has been of great support here, as it has with regard to access to scientific and technological progress.

1171. The preservation of our natural heritage has been a matter of special interest for the State of Costa Rica and this has led to the adoption of legislative and administrative measures to ensure the most efficient and rational use of natural resources, as well as a sound application of the results of scientific and technological progress to that end. However, it is becoming vital for the country to assess the means used up to now, to safeguard our natural and environmental resources over the long term.

1172. In that connection, we must point to the proportion of the world's biodiversity contained within Costa Rica: around 5%. That is also the result of the way in which the country has managed the work of conservation, which is reflected in the fact that about 30% of its territory is under forest cover and that among Central American countries it is the one with the greatest proportion of its territory under agro-ecosystems (70%). However, there are important warning signs, such as its rating as the second most deforested country in Central America, that require an appropriate response.

---

180 The other newspapers devote between 5 per cent and 0 per cent of their space to culture. It must be noted that the three first in the list are weeklies with a small circulation and very specific target readers.

181 For years ICE has played a predominant role in energy supply, permitting its distribution throughout the national territory and marketing it through 67 electricity agencies which deal with approximately 50,000 requests a year, for new services, transfers, replacement of electricity meters, disconnections or line extensions etc.. The abovementioned operations are part of the System of Commercial Administration (SACE), which relies essentially on a data base containing information about 495,236 customers connected to the 16,369 kilometres of ICE's distribution network, as well as on a network of 435 work stations located in the various regional agencies which allows for advance consultation, updating and modification of the data in the above-mentioned base. Over time, SACE has made possible further decentralization of customer service by means of online connection to the central computer: a transaction with any given customer can be checked on any computer connected to the system.

182 In annex I, on the subject of article 15, there are two graphs showing the growth in fixed and mobile telephone services.

183 Created by Law No. 169.

184 Annex 1 shows the financing provided by the Incentives Commission.

185 The idea is that ENA will facilitate public management that will :

- Place public management of the environment at the highest level;
- Execute State environment policy on the basis of the Environment Act of 1995;
- Incorporate into the debate on the environment concepts such as inclusion, competitiveness and poverty reduction;
- Envisage and apply the concept of opportunity cost, so as to assume political responsibility and respond to the expectations of civil society;
- Respond to the demands of society by improving concrete conditions for quality of life for individuals and the country as a whole;
- Promote the inclusion of environmental costs and benefits in national accounting systems;
- Foster the development of environmental education and culture.

190 Law No. 202 of 24 October 1990.