CHAPTER FOUR

INTEGRAL ECOLOGY

137. Since everything is closely interrelated, and today's problems call for a vision capable of taking into account every aspect of the global crisis, I suggest that we now consider some elements of an integral ecology, one which clearly respects its human and social dimensions.

I. ENVIRONMENTAL, ECONOMIC AND SOCIAL ECOLOGY

138. Ecology studies the relationship between living organisms and the environment in which they develop. This necessarily entails reflection and debate about the conditions required for the life and survival of society, and the honesty needed to question certain models of development, production and consumption. It cannot be emphasized enough how everything is interconnected. Time and space are not independent of one another, and not even atoms or subatomic particles can be considered in isolation. Just as the different aspects of the planet – physical, chemical and biological – are interrelated, so too living species are part of a network which we will never fully explore and understand. A good part of our genetic code is shared by many living beings. It follows that the fragmentation of knowledge and the isolation of bits of information can actually become a form of ignorance, unless they are integrated into a broader vision of reality.

139. When we speak of the "environment", what we really mean is a relationship existing between nature and the society which lives in it. Nature cannot be regarded as something separate from ourselves or as a mere setting in which we live. We are part of nature, included in it and thus in constant interaction with it. Recognizing the reasons why a given area is polluted requires a study of the workings of society, its economy, its behaviour patterns, and the ways it grasps reality. Given the scale of change, it is no longer possible to find a specific, discrete answer for each part of the problem. It is essential to seek comprehensive solutions which consider the interactions within natural systems themselves and with social systems. We are faced not with two separate crises, one environmental and the other social, but rather with one complex crisis which is both social and environmental. Strategies for a solution demand an integrated approach to combating poverty, restoring dignity to the excluded, and at the same time protecting nature.

140. Due to the number and variety of factors to be taken into account when determining the environmental impact of a concrete undertaking, it is essential to give researchers their due role, to facilitate their interaction, and to ensure broad academic freedom. Ongoing research should also give us a better understanding of how different creatures relate to one another in making up the larger units which today we term "ecosystems". We take these systems into account not only to determine how best to use them, but also because they have an intrinsic value independent of their usefulness. Each organism, as a creature of God, is good and admirable in itself; the same is true of the harmonious ensemble of organisms existing in a defined space and functioning as a system. Although we are often not aware of it, we depend on these larger systems for our own existence. We need only recall how ecosystems interact in dispersing carbon dioxide, purifying water, controlling illnesses and epidemics, forming soil, breaking down waste, and in many other ways which we overlook or simply do not know about. Once they become conscious of this, many people realize that we live and act on the basis of a reality which has previously been given to us, which precedes our existence and our abilities. So, when we speak of "sustainable use",

consideration must always be given to each ecosystem's regenerative ability in its different areas and aspects.

141. Economic growth, for its part, tends to produce predictable reactions and a certain standardization with the aim of simplifying procedures and reducing costs. This suggests the need for an "economic ecology" capable of appealing to a broader vision of reality. The protection of the environment is in fact "an integral part of the development process and cannot be considered in isolation from it".[114] We urgently need a humanism capable of bringing together the different fields of knowledge, including economics, in the service of a more integral and integrating vision. Today, the analysis of environmental problems cannot be separated from the analysis of human, family, work-related and urban contexts, nor from how individuals relate to themselves, which leads in turn to how they relate to others and to the environment. There is an interrelation between ecosystems and between the various spheres of social interaction, demonstrating yet again that "the whole is greater than the part".[115]

142. If everything is related, then the health of a society's institutions has consequences for the environment and the quality of human life. "Every violation of solidarity and civic friendship harms the environment".[116] In this sense, social ecology is necessarily institutional, and gradually extends to the whole of society, from the primary social group, the family, to the wider local, national and international communities. Within each social stratum, and between them, institutions develop to regulate human relationships. Anything which weakens those institutions has negative consequences, such as injustice, violence and loss of freedom. A number of countries have a relatively low level of institutional effectiveness, which results in greater problems for their people while benefiting those who profit from this situation. Whether in the administration of the state, the various levels of civil society, or relationships between individuals themselves, lack of respect for the law is becoming more common. Laws may be well framed yet remain a dead letter. Can we hope, then, that in such cases, legislation and regulations dealing with the environment will really prove effective? We know, for example, that countries which have clear legislation about the protection of forests continue to keep silent as they watch laws repeatedly being broken. Moreover, what takes place in any one area can have a direct or indirect influence on other areas. Thus, for example, drug use in affluent societies creates a continual and growing demand for products imported from poorer regions, where behaviour is corrupted, lives are destroyed, and the environment continues to deteriorate.

II. CULTURAL ECOLOGY

143. Together with the patrimony of nature, there is also an historic, artistic and cultural patrimony which is likewise under threat. This patrimony is a part of the shared identity of each place and a foundation upon which to build a habitable city. It is not a matter of tearing down and building new cities, supposedly more respectful of the environment yet not always more attractive to live in. Rather, there is a need to incorporate the history, culture and architecture of each place, thus preserving its original identity. Ecology, then, also involves protecting the cultural treasures of humanity in the broadest sense. More specifically, it calls for greater attention to local cultures when studying environmental problems, favouring a dialogue between scientific-technical language and the language of the people. Culture is more than what we have inherited from the past; it is also, and above all, a living, dynamic and participatory present reality, which cannot be excluded as we rethink the relationship between human beings and the environment.

144. A consumerist vision of human beings, encouraged by the mechanisms of today's globalized economy, has a levelling effect on cultures, diminishing the immense variety which is the heritage of all humanity. Attempts to resolve all problems through uniform regulations or technical interventions can lead to overlooking the complexities of local problems which demand the active participation of all members of the community. New processes taking shape cannot always fit into frameworks imported from outside; they need to be based in the local culture itself. As life and the world are dynamic realities, so our care for the world must also be flexible and dynamic. Merely technical solutions run the risk of addressing symptoms and not the more serious underlying 42 problems. There is a need to respect the rights of peoples and cultures, and to appreciate that the development of a social group presupposes an historical process which takes place within a cultural context and demands the constant and active involvement of local people from within their proper culture. Nor can the notion of the quality of life be imposed from without, for quality of life must be understood within the world of symbols and customs proper to each human group.

145. Many intensive forms of environmental exploitation and degradation not only exhaust the resources which provide local communities with their livelihood, but also undo the social structures which, for a long time, shaped cultural identity and their sense of the meaning of life and community. The disappearance of a culture can be just as serious, or even more serious, than the disappearance of a species of plant or animal. The imposition of a dominant lifestyle linked to a single form of production can be just as harmful as the altering of ecosystems. 146. In this sense, it is essential to show special care for indigenous communities and their cultural traditions. They are not merely one minority among others, but should be the principal dialogue partners, especially when large projects affecting their land are proposed. For them, land is not a commodity but rather a gift from God and from their ancestors who rest there, a sacred space with which they need to interact if they are to maintain their identity and values. When they remain on their land, they themselves care for it best. Nevertheless, in various parts of the world, pressure is being put on them to abandon their homelands to make room for agricultural or mining projects which are undertaken without regard for the degradation of nature and culture.

III. ECOLOGY OF DAILY LIFE

147. Authentic development includes efforts to bring about an integral improvement in the quality of human life, and this entails considering the setting in which people live their lives. These settings influence the way we think, feel and act. In our rooms, our homes, our workplaces and neighbourhoods, we use our environment as a way of expressing our identity. We make every effort to adapt to our environment, but when it is disorderly, chaotic or saturated with noise and ugliness, such overstimulation makes it difficult to find ourselves integrated and happy.

148. An admirable creativity and generosity is shown by persons and groups who respond to environmental limitations by alleviating the adverse effects of their surroundings and learning to orient their lives amid disorder and uncertainty. For example, in some places, where the façades of buildings are derelict, people show great care for the interior of their homes, or find contentment in the kindness and friendliness of others. A wholesome social life can light up a seemingly undesirable environment. At times a commendable human ecology is practised by the poor despite numerous hardships. The feeling of asphyxiation brought on by densely populated residential areas is countered if close and warm relationships develop, if communities are created, if the limitations of the environment are compensated for in the interior of each person who

feels held within a network of solidarity and belonging. In this way, any place can turn from being a hell 43 on earth into the setting for a dignified life.

149. The extreme poverty experienced in areas lacking harmony, open spaces or potential for integration, can lead to incidents of brutality and to exploitation by criminal organizations. In the unstable neighbourhoods of mega-cities, the daily experience of overcrowding and social anonymity can create a sense of uprootedness which spawns antisocial behaviour and violence. Nonetheless, I wish to insist that love always proves more powerful. Many people in these conditions are able to weave bonds of belonging and togetherness which convert overcrowding into an experience of community in which the walls of the ego are torn down and the barriers of selfishness overcome. This experience of a communitarian salvation often generates creative ideas for the improvement of a building or a neighbourhood.[117]

150. Given the interrelationship between living space and human behaviour, those who design buildings, neighbourhoods, public spaces and cities, ought to draw on the various disciplines which help us to understand people's thought processes, symbolic language and ways of acting. It is not enough to seek the beauty of design. More precious still is the service we offer to another kind of beauty: people's quality of life, their adaptation to the environment, encounter and mutual assistance. Here too, we see how important it is that urban planning always take into consideration the views of those who will live in these areas.

151. There is also a need to protect those common areas, visual landmarks and urban landscapes which increase our sense of belonging, of rootedness, of "feeling at home" within a city which includes us and brings us together. It is important that the different parts of a city be well integrated and that those who live there have a sense of the whole, rather than being confined to one neighbourhood and failing to see the larger city as space which they share with others. Interventions which affect the urban or rural landscape should take into account how various elements combine to form a whole which is perceived by its inhabitants as a coherent and meaningful framework for their lives. Others will then no longer be seen as strangers, but as part of a "we" which all of us are working to create. For this same reason, in both urban and rural settings, it is helpful to set aside some places which can be preserved and protected from constant changes brought by human intervention.

152. Lack of housing is a grave problem in many parts of the world, both in rural areas and in large cities, since state budgets usually cover only a small portion of the demand. Not only the poor, but many other members of society as well, find it difficult to own a home. Having a home has much to do with a sense of personal dignity and the growth of families. This is a major issue for human ecology. In some places, where makeshift shanty towns have sprung up, this will mean developing those neighbourhoods rather than razing or displacing them. When the poor live in unsanitary slums or in dangerous tenements, "in cases where it is necessary to relocate them, in order not to heap suffering upon suffering, adequate information needs to be given beforehand, with choices of decent housing offered, and the people directly involved must be part of the process".[118] At the 44 same time, creativity should be shown in integrating rundown neighbourhoods into a welcoming city: "How beautiful those cities which overcome paralyzing mistrust, integrate those who are different and make this very integration a new factor of development! How attractive are those cities which, even in their architectural design, are full of spaces which connect, relate and favour the recognition of others!"[119]

153. The quality of life in cities has much to do with systems of transport, which are often a source of much suffering for those who use them. Many cars, used by one or more people,

circulate in cities, causing traffic congestion, raising the level of pollution, and consuming enormous quantities of non-renewable energy. This makes it necessary to build more roads and parking areas which spoil the urban landscape. Many specialists agree on the need to give priority to public transportation. Yet some measures needed will not prove easily acceptable to society unless substantial improvements are made in the systems themselves, which in many cities force people to put up with undignified conditions due to crowding, inconvenience, infrequent service and lack of safety.

154. Respect for our dignity as human beings often jars with the chaotic realities that people have to endure in city life. Yet this should not make us overlook the abandonment and neglect also experienced by some rural populations which lack access to essential services and where some workers are reduced to conditions of servitude, without rights or even the hope of a more dignified life.

155. Human ecology also implies another profound reality: the relationship between human life and the moral law, which is inscribed in our nature and is necessary for the creation of a more dignified environment. Pope Benedict XVI spoke of an "ecology of man", based on the fact that "man too has a nature that he must respect and that he cannot manipulate at will".[120] It is enough to recognize that our body itself establishes us in a direct relationship with the environment and with other living beings. The acceptance of our bodies as God's gift is vital for welcoming and accepting the entire world as a gift from the Father and our common home, whereas thinking that we enjoy absolute power over our own bodies turns, often subtly, into thinking that we enjoy absolute power over creation. Learning to accept our body, to care for it and to respect its fullest meaning, is an essential element of any genuine human ecology. Also, valuing one's own body in its femininity or masculinity is necessary if I am going to be able to recognize myself in an encounter with someone who is different. In this way we can joyfully accept the specific gifts of another man or woman, the work of God the Creator, and find mutual enrichment. It is not a healthy attitude which would seek "to cancel out sexual difference because it no longer knows how to confront it".[121]

IV. THE PRINCIPLE OF THE COMMON GOOD

156. An integral ecology is inseparable from the notion of the common good, a central and unifying 45 principle of social ethics. The common good is "the sum of those conditions of social life which allow social groups and their individual members relatively thorough and ready access to their own fulfilment".[122]

157. Underlying the principle of the common good is respect for the human person as such, endowed with basic and inalienable rights ordered to his or her integral development. It has also to do with the overall welfare of society and the development of a variety of intermediate groups, applying the principle of subsidiarity. Outstanding among those groups is the family, as the basic cell of society. Finally, the common good calls for social peace, the stability and security provided by a certain order which cannot be achieved without particular concern for distributive justice; whenever this is violated, violence always ensues. Society as a whole, and the state in particular, are obliged to defend and promote the common good.

158. In the present condition of global society, where injustices abound and growing numbers of people are deprived of basic human rights and considered expendable, the principle of the common good immediately becomes, logically and inevitably, a summons to solidarity and a preferential option for the poorest of our brothers and sisters. This option entails recognizing

the implications of the universal destination of the world's goods, but, as I mentioned in the Apostolic Exhortation Evangelii Gaudium,[123] it demands before all else an appreciation of the immense dignity of the poor in the light of our deepest convictions as believers. We need only look around us to see that, today, this option is in fact an ethical imperative essential for effectively attaining the common good.

V. JUSTICE BETWEEN THE GENERATIONS

159. The notion of the common good also extends to future generations. The global economic crises have made painfully obvious the detrimental effects of disregarding our common destiny, which cannot exclude those who come after us. We can no longer speak of sustainable development apart from intergenerational solidarity. Once we start to think about the kind of world we are leaving to future generations, we look at things differently; we realize that the world is a gift which we have freely received and must share with others. Since the world has been given to us, we can no longer view reality in a purely utilitarian way, in which efficiency and productivity are entirely geared to our individual benefit. Intergenerational solidarity is not optional, but rather a basic question of justice, since the world we have received also belongs to those who will follow us. The Portuguese bishops have called upon us to acknowledge this obligation of justice: "The environment is part of a logic of receptivity. It is on loan to each generation, which must then hand it on to the next".[124] An integral ecology is marked by this broader vision.

160. What kind of world do we want to leave to those who come after us, to children who are now growing up? This question not only concerns the environment in isolation; the issue cannot be approached piecemeal. When we ask ourselves what kind of world we want to leave behind, we 46 think in the first place of its general direction, its meaning and its values. Unless we struggle with these deeper issues, I do not believe that our concern for ecology will produce significant results. But if these issues are courageously faced, we are led inexorably to ask other pointed questions: What is the purpose of our life in this world? Why are we here? What is the goal of our work and all our efforts? What need does the earth have of us? It is no longer enough, then, simply to state that we should be concerned for future generations. We need to see that what is at stake is our own dignity. Leaving an inhabitable planet to future generations is, first and foremost, up to us. The issue is one which dramatically affects us, for it has to do with the ultimate meaning of our earthly sojourn.

161. Doomsday predictions can no longer be met with irony or disdain. We may well be leaving to coming generations debris, desolation and filth. The pace of consumption, waste and environmental change has so stretched the planet's capacity that our contemporary lifestyle, unsustainable as it is, can only precipitate catastrophes, such as those which even now periodically occur in different areas of the world. The effects of the present imbalance can only be reduced by our decisive action, here and now. We need to reflect on our accountability before those who will have to endure the dire consequences.

162. Our difficulty in taking up this challenge seriously has much to do with an ethical and cultural decline which has accompanied the deterioration of the environment. Men and women of our postmodern world run the risk of rampant individualism, and many problems of society are connected with today's self-centred culture of instant gratification. We see this in the crisis of family and social ties and the difficulties of recognizing the other. Parents can be prone to impulsive and wasteful consumption, which then affects their children who find it increasingly difficult to acquire a home of their own and build a family. Furthermore, our inability to think

seriously about future generations is linked to our inability to broaden the scope of our present interests and to give consideration to those who remain excluded from development. Let us not only keep the poor of the future in mind, but also today's poor, whose life on this earth is brief and who cannot keep on waiting. Hence, "in addition to a fairer sense of intergenerational solidarity there is also an urgent moral need for a renewed sense of intragenerational solidarity".[125