

# **Infusing African Indigenous Knowledge in Global Environmental Discourse: Rethinking “Development” in South Africa**

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## **Background**

*“The ecological question has to do with reaching a new level of globalization, of world awareness and conscience, where there is a universal understanding of the importance of the earth as a whole, the welfare of nature and of humankind, the interdependence of all, and the apocalyptic catastrophe menacing creation” (Boff, 1995: 7)*

Global concern over the state of the natural environment has been increasing enormously in recent years. This concern has materialized within global, national and local policy circles with an array of citizen participation in environmental conservation and efforts at the national and local levels as well as international initiatives such as the 1992 Earth Summit, 1994 Rio summit, 1997 Kyoto Summit, and more recently the Johannesburg Summit on Sustainable Development; all aiming at dealing with the environmental "crisis" with poverty deepening and environmental degradation worsening. In much of these initiatives, several conclusions have been reached as to the effect and the magnitude of the crisis and the solutions that can be adopted in order to alleviate the global situation.

The 1992 Rio summit on global warming recognized a correlation between industrial development and the increase of radioactive gases in the atmosphere and suggested that development in terms of industrial machinery is one of the major causes of the environmental crisis (Aadrwal and Narain, 1995). The Rio Summit declaration on the environment and development, for instance, recognizes that development in terms of modernization and economic growth has to be sustainable to avoid exploitation of humans and the environment. The Rio Summit recognized “the different contributions to global environmental degradation in which states have common but differentiated responsibilities in view of the pressures their societies place on the global environment and of the technologies and financial resources they command” (The Rio Summit Declaration, p.87).

In other words, although the environmental crisis is a global one, different stakeholders (or countries) have different responsibilities and concerns in the environmental debate. Equally important in the Rio Summit is the impact that capitalism has made on the environment. The global capitalist model of development as the remaining dominant economic model in the world exhausted the world natural resources in the name of unlimited (or scarcity natural resources in which humans have a right to seize). After all, confronted by the intensification of development, globalization and neo-liberal economic restructuring policies that have gained popularity after the Cold War and have been adopted throughout the world, capitalizing on the environment rather than on humans is seen as legitimate method to intensify the process of development. As a result, countries embroil in a web of limitless over-consumption which, tend to put absolute priority on short-term profit making at the expense of the marginalized and the environment. It is estimated that the rate of consumption of the world natural resources is increasing rapidly as countries of the South are encouraged to "privatize" their institutions and economies. (Keating, 1997).

Further, the exigencies of global competition and free trade force counties with unequal economic power and resources to consume and produce large numbers of products in an attempt to compete. For instance, research indicates that the industrialized countries consume about 87 percent of the world's natural resources; yet making about 13 percent of the world's population, while the lesser-developed and developed countries consume the opposite (Boff, 1995, Schainberg and Gould, 1994). The over-consumption of goods in the name of development, economic growth, and modernization has contributed the largest share to the degradation of the global environment. Even though development has had its benefits, (i.e. technology, high standard of living, and monetary wealth) its costs have been enormous. From air and water pollution, to the increasing human population, acid rain, decrease in bio-diversity, and global warming, the effects of the ideology of development on the environment have been disastrous.

A question therefore arises, for whom does "development" benefit? And how? To answer this question one has to ask another: What is development? It all depends, I believe, on who (and how one) defines and frames the concept of development and for what purpose? The question of situated meanings and the framing of realities has been examined extensively in social research in terms of the extent of plurality of interests in defining situations or phenomena (Mazama, 1998; Shiva, 1997; and Simbodwe, 1993). For instance, Mazama (1998: 3-5), in examining Western literary discourse, contents that there is a tendency for individuals to engage in systemic self-glorification in which individual knowledge and worldviews are legitimized as reliable whereas other's knowledge and worldviews are deemed not. Similarly Mohanty' (1991) contends that within the Western development discourse, there is a tendency for individuals to operate on hegemonic and universal assumptions of realities and situations in which people find them. This is done by using "vocabularies of motive" to increase their

effectiveness in order to convincingly convey their case as relevant in an attempt to frame and legitimize their positions" (Krogman, 1996).

This paper focuses on disastrous effects of the ideology of development and its rationalizations. Using concepts of "modernization", "development", and "capitalism" as rationalizations to exploit the environment and communities, developed countries justified their monopoly and control over the world's natural resources at the expense of the poorer countries and the environment. This paper discusses the ideology of "development" as it relates to the environmental crisis existing today. The Marxist perspective is used to argue that although the concept of development implies the prosperity of the West (Western Europe and North America) and a greater co-operation among nation states through increased trade, it means opposite to what it suggests. Thus, what "development" really means depends on who defines and frames the concept.

Development theorists often argue that the only path to prosperity and growth is for developing countries to "modernize" and "civilize" their economies. Development in that worldview involves limitless industrialization, capital accumulation, and modernization regardless of the social and environmental realities. I argue that the concept of "development" is socially (culturally) constructed phenomenon that is relative to different societies and that differs incredibly from one cultural context to another. The concept of development in this paper is treated as a process that conveys the unfettered power and control of economic interests perpetuated by foreign ideological conceptions that transcends cultural boundaries and penetrates national economies, often overriding local authority and knowledge.

This paper also argues that as an attempt to "modernize" and "develop" their economies, desperate governments in the developing countries take ideological positions that are consistent with foreign interests and thus making them ideologically dependent on the West for their own development. As a result, they frame or construct their version of reality about their surroundings (in this case the natural environment) by delimiting what is important and meaningful for the majority in their own communities. These foreign constructs of reality (about the environment and development) are then adopted by governments that are eager to develop in their policies while ignoring or even devaluing local input and knowledge about development and its relation to the environment.

The paper is divided into four different sections. The first part of this paper defines briefly what the terms "ideology" and "dependency" in relation to the concept of "development" mean. Thus, how the term "ideology" and "dependency" as defined in the literature relate to the concept of development. I argue that as a result of colonialism and its free-market orientation there has been a dominant ideology for environmental management in the special case of South Africa.

The second part of the paper discusses the important theoretical frameworks upon which the issue of ideological dependency, based on its particular focus as historical frameworks was implemented in South African context. The historical context of South Africa and the legacy of colonialism (or apartheid) are central to an understanding of the ideological dependency inherent in development strategies and the interconnection between environmental degradation and the ideological dependency of South Africa. This section will present an account of the development concepts adopted in South Africa and its relationship to the environment within the colonial (apartheid) and post-colonial eras, to demonstrate the way in which the ideology of "development" has profoundly affected interactions between people and the environment.

By considering the ideological models of development (i.e. growth and modernization paradigms), this paper intends to reveal the evolution of a dependency, which in the case of South Africa is ideological both in the apartheid and perhaps in the post-apartheid era. This ideological dependency, the paper contests, has proven increasingly destructive and dis-empowering to South Africa's social and ecological vitality. This section, therefore, will examine ideological dependency at the local level in South Africa with a more theoretical questioning of the sustainability of capitalist exploitation and degradation of environmental resources in the long term, especially given the historic record in the context of South African "separate development" (or apartheid ideology and its linkages to environmental deterioration). This analysis will reveal a more in-depth consideration of the ideological dependency and control in relation to development ideology in the context of neo-imperialism and dependency issues reflected in the education system. I argue that in line with the dependency on the ideology of development and its capitalist focus, the education system (more specifically schooling) was often used as an instrument to ensure that "development" occurs.

In fact, education in the context of South Africa was an instrument used by the previous apartheid state to ensure that "development" (conceptualized as modernization, progress, and economic growth) occurs for some communities and not for others. Thus, because of the nature of the apartheid education and its racial and perhaps class basis, development was implemented differently for South Africans. As a result different communities in South Africa idealized the concept of development establishing some form of dependency in the concept before and after apartheid especially as development relates to the environment (Cassim, 1988).

The last section of the paper stems from a consideration of linkages that exist between the ideology of development on national and local levels in South Africa to international levels. This section stresses the need for significant reassessment of the capacity of global capitalist economy to provide an alternative for South Africa. Given the evidence of ideological dependence and its relationship to

environmental degradation within South Africa, the conclusion suggests that massive changes must take place globally in the way societies and governments view and construct their relationships with their environment. Education as an empowering method of knowledge acquisition about the environment and detrimental effects of the concept of development on the environment is briefly mentioned in order to raise global awareness about the dangers of the capitalist orientated ideology of development.

## **The Ideology of Development**

Before explaining the dangers of the capitalist orientated ideology of development and its detrimental effects on the environment, I believe it is important to, firstly, describe what I mean by the terms: ideology, development and dependency. Meighan (1981) defines an ideology as a:

broad interlocked set of ideas and beliefs about the world held by a group of people...This system of beliefs is usually an explanation or account of "the way things are" and for the group that holds this ideology, it becomes the taken-for-granted way of making sense about the world (p. 155).

The first part of Meighan's definition of the concept of ideology identifies an ideology as a set of "interlocked ideas and beliefs" in which a group of people define their world, explain phenomenon and guide their activities upon. This set of beliefs and ideas according to Ball and Dagger (1995):

explains and evaluates social conditions, helps people understand their place in society, and thus providing a program for social action and political action (p.9).

In other words, an ideology means the production and representation of ideas, beliefs and values and the manner in which they are expressed and lived out by both individuals and groups. Simply put, ideology refers to the production of sense of meaning. This production of meaning according to Gibbons and Youngman (1996) is: socially constructed and transmitted...with some significant means are of formal articulation, scope, internal consistency, and durability. As such, it provides both a normative frameworks for understanding the political world and a practical guide for political action (p.6).

Thus, through a production of meaning, situations can be described as a way of viewing the world in which individuals tend to accept as natural or as common sense. An ideology is the result of the intersection of meaning and power in society in which values, beliefs, and ideas often produce conceptions about the truth. Ideologies contain ideas and beliefs about reality that is often taken for granted, unquestioned, and often passionately embraced by social groups. It provides societies with

both the description and explanation of their social reality as they experience it and promotes a shared understanding of what their collective lives are all about.

Further, ideologies are inextricably tied to value systems and value judgements which tend to be legitimized. All ideologies have social roots and every ideology is a system of ideas that expresses a social reality that is independent on the perception, which its cultural bearers may have on it. Hamilton (1987) suggests that ideologies can be rational or irrational depending on the class (social position) interests and the social reality represented. In other words, ideologies provide a rationale for the global unequal distribution of privilege, power, and wealth in society. In the context of this paper, the ideology of development and its capitalist orientation essentially provides a rationale for the global abuse of the natural environment.

For instance, ideology of development and its capitalist orientation proclaimed as essentially rational to the capitalist because the economic benefits are being realized. However, by the same token capitalist, orientated development might be irrational to the worker and the "oppressed strata" of a society because their interests are negated by the same system. Ideology as an "interlocked set of ideas and beliefs about the world held by a group of people" and as a "socially constructed and transmitted in which people understand their place in society, and thus, providing a program for social action and political action", (Gibbons and Youngman, 1996; Ball and Dagger, 1995; and Meighan, 1981) is both Western in form and content. In most developing countries ideologies of the West such as the development ideology dominates enabling other countries to depend on such ideologies for legitimacy and existence (Eisenstadt, 1998).

Santos (1970) defines dependency as " a situation in which the economy of certain countries is conditioned by the development and expansion of another economy to which the former is subjected" (p. 231). In Santos' view, the relation of interdependence can only be dialectical, the relation between two or more economies or systems must be that one assumes dominance, decides its fate as well as the fate of others. Santos distinguished three forms of dependence namely: colonial dependence, financial-industrial dependence, and technological dependence (p. 231-234).

According to Santos, export trade, mainly agriculture and mineral products from the colonies; marks colonial dependence and the import of manufactured products from the colonizing power. The financial/industrial dependency is marked by enclave economies, which later gives birth to "growth without development" (Amin, 1976). In addition, the third form of dependence (i.e. technological), is a post-World War II development that coincided with the rise of multinational corporations, which have capital, and are able to invest in dependent economies but unwilling to surrender decision making power. I argue that dependency can also be ideological in nature.

Martisussen (1997) identifies several models and conceptions of the ideology of development. These include economic growth, sustainable development, dependency, modernization models among others. For the purpose of this paper, I use the modernization and economic growth models to illustrate ideological dependency in South Africa. Rutherford (1992) offers a classical economic definition of the concept of development as “the movement of any economy from agricultural activities using simple technology to the production of industrial products and a range of services using modern technology” (p.118).

Classical sociologists have been fascinated with the concept of development for centuries without any clear definite consensus to its meaning. A common understanding of the concept of development refers to contemporary patterns of social life associated with advanced levels of technological advancement. Development is often characterized in terms of consciousness of the discontinuity of time: a break with tradition or a feeling of novelty in the face of a passing (or linear) moment. Thus, being modern lies in adopting a certain attitude with respect to time. For instance, Marx and Engels (1977) conceptualize development as an outgrowth of conflict between social classes that would lead to the overthrow of capitalist state through a socialist revolution.

In addition, Durkheim (1972) conceptualizes development as a general moral change from organic to mechanical solidarity. Durkheim views the concept of development as a process that generally brings about change in how individuals ought to behave, yet not destroying the type of solidarity or common beliefs that hold communities together. For instance, the change from traditional society (that is characterized by beliefs in supernatural explanations of reality) to modern whereby scientific or reliable/testable explanation are adopted. Arguing from similar lines, Weber (1958) suggests that development is an adoption of rational thinking (especially formal of legal rational authority) in which a calculation of the most sufficient means to achieve an end becomes a dominant force for change. Thus, development as a concept involves a change in the way of thinking about ones surroundings.

At the core of the ideology of development, according to Martinussen (1997), is to increase production and consumption (p.36). Increased production in a sense of increased capital accumulation of goods and consumption of those goods. According to Meier (1989), for development to occur the real per capita income of a country must increase over a long period of time while simultaneously poverty is reduced and the inequality in society is generally diminished" (p. 6). Thus, growth is seen in a sense of a cumulative increase in income (per capita) accompanied by structural and institutional changes in the economy. Consequently, the aggregate growth in the per capita income becomes a reflection of growth.

An influential development ideology that can be applied in South Africa is that of Rostow (1960). In his conception of the world economic history, Rostow assigns to the post-traditional societies the attitudes of economic underdevelopment. For Rostow, the developing countries are pre-modern or traditional because they "developed within limited production functions which put a ceiling on the level of attainable output per head" (p. 6).

Rostow conceives economic development, and in fact, modern societal transformation, as beginning in Western Europe about the late seventeenth century and early eighteenth century when Europeans, by Britain, started to apply regularly and systematically their achievements in science and technology to agriculture and industry. Thus, it is through technological innovation and industrial growth that development and modernization occurs. Rostow devotes ideological paradigm of development both socio-cultural and institutional and if followed correctly results in self-generating development.

Rostow's transitional societies, which face the preconditions for "take-off" must create their own development institutions and infrastructure, generate science-based knowledge and apply this knowledge to production. To achieve a "take-off", which will lead to the drive to maturity and the state of "high-mass consumption", reinstates to steady growth and development. This requires, according to Rostow, the directive force and powers of a politically effective national state.

In Rostow's words, the "take off" awaits:

...not only the building of social overhead capital and surge of technological development in industry and agriculture, but also the emergence of political power of a group prepared to regard the modernization of the economy serious, higher-order political business (p. 8).

Rostow's conceptualization of the ideology of development adheres that traditional societies worldwide will be transformed by industrialization and capitalism to resemble Western countries and the convergence will cause all nations to look alike. The underlying assumption being that because of industrialization and technological innovation, Western countries have achieved certain, positively evaluated conditions and that changes in the Third World countries towards increasing similarity with these industrialized countries is regarded as development.

### **Ideological Dependency and the fiction of "Development" in South Africa**

*"The 'development' currently imposed by the industrial nations on the third world is producing a whole series of interconnected negative impacts on the very people the process purports to help"*  
(Goldsmith, 1995:68)



In order to understand the ideological dependent relationships in South Africa, especially in the context of the "free market" economy and its detrimental effects on the environment, theoretical considerations of the self-destructive and exploitative dynamics of capitalist systems are essential. The work of Marx (1993) provides an important foundation for deconstructing South Africa's ideological dependency that is based on capitalist dynamics and tendencies. Many of the environmental and development strategies implemented in South Africa have been historically dependent upon Western (North American and Western European) ideologies of what development *ought* to be.

In addition, Marx critical analysis of capitalism provides invaluable insights into capitalist dynamics, the transformation of (environmental) resources and people into "forms of production" and the self-destructive consequences of the ideological and socio-economic models of the free market as they are played out in South Africa and other developing countries. Equally important is Marx' consideration of the reproduction of the capitalist system (i.e. through expanding and intensifying the exploitation and appropriation of forms of production to avert crisis situations in the short term, contributing to greater, unsolvable crisis situations in the long term) in connection with the exploitation of the South African environment during the colonial (apartheid) era.

Furthermore, Marx's analysis of the profit motive and the inevitable commodification of products and of the environment resulting from the capitalist ideology is very important in the context of South Africa's environmental degradation. Thus, the imposition of the capitalist ideological and socio-economic models upon African peoples and their environment has been inseparably linked with increasing ecological deterioration in South Africa. To analyze South Africa's ideological dependency, we need to isolate three conditions, which Rostow (1960) identifies as necessary for economic development and modernization to occur.

Firstly, the existence of "preconditions for take off " and the creation of institutions and infrastructure and in the case of South Africa a capitalist economic system provides the framework for ideological dependency. Because of the hierarchical structure of the capitalist economy and its science based knowledge production South Africa became dependent on the ideology of development on the onset. The first stage of economic development that Rostow advocates was realized when the development of an ideology of "separate development" (or apartheid) within the confines of capitalism was adopted. Apartheid is an Afrikaans word that means "apartness" or separateness. It refers to policies of racial segregation or "baaskap" (meaning white dominance) and "verligte" or "enlightenment" (Comaroff, 1989:661-666)

Fundamentally, the ideology of separate development or apartheid rests on three assumptions: that each cultural group should be encouraged to retain its own identity and develop according to its "unique" or distinct characteristics; that, with a population of diverse social, racial and class groups, the way to ensure peaceful coexistence and progress was through institutional and racial separation; and that the only agency capable of exercising overall responsibility for this development was state controlled (Cobbe, 1988; Ross, 1967).

The ideology of separate development in South Africa has both complex interaction between the nation state, (which is the apartheid state) as well as the ideology of development on the other hand, and the aspirations and liberation ideologies developed by African leaders in the struggles against colonial rule on the other hand. This makes the ideology of "separate development" in South Africa an essentially political and ideological exercise. Separate development implies a dual responsibility of a political economy and this requires a balancing of economic resources and political forces. For the country whose resources were distributed unevenly due to racial and class background, the inefficient use of limited resources has tended to penalize both environmental and economic development.

Secondly, in accordance with Rostow's (1960) conceptualization of economic development, the state (apartheid) must create economic and social structures, production and distribution relations through which class interests (and I argue race interests) can crystallize and a value system, backed with strong economic rewards for the participants in the system. In South Africa, the prevalence of class and race interests within the confines of the development milieu was present especially in the education system. The preconditions of inequalities in resource distribution and knowledge itself created preconditions for "take off".

Thirdly, Rostow suggests that in order for development to "mature", a creation of a bourgeois class of capitalists and industrialists, as well as the petty-bourgeois class of professionals, intellectuals, and business leaders, whose class interests coincide with those of international monopoly capitalism, must occur. Thus, in order for development to occur, a directive force of a state and concerned citizens ought to play an important part in ensuring that a state of "high-mass consumption" is realized.

How are business leaders, professionals and intellectuals produced? This can be achieved through education or formal schooling. In fact, according to Bowles and Gintis (1976) schooling serves three functions namely: social reproduction (selection allocation), whereby students are sorted and allocated to tracks on basis of ability and talent; socialization or (cultural transmission), in which ideologies and values are learned; and most importantly the legitimization of the capitalist social order.

According to Contenta (1993), the legitimization of the capitalist order in which the interests of the middle and upper classes are served alienates those without economic power. Thus, schooling as an instrument of producing the preconditions for development to take-off and its emphasis on the enhancement of personal development and achievement enables people to distinguish themselves in terms of achievement, either for themselves, their families, and themselves. (Denton, 1998) This need for differentiation becomes an alienating factor through providing a universal expectation for unusual accomplishment (and reward) that in no possible way can all members within the society achieve uniformity.

The education system in South Africa was designed and organized so that students absorb ideological attitudes that separate development (or apartheid) is the key to prosperity and growth. The role of education and formal schooling in South Africa from the beginning was a bit ironic. From the onset the question of Black education was at the center of the separate development ideology. Major questions were whether to include or exclude blacks in the "modern" sphere of society. Thus were they to be part of a common, westernized society, or were they to be segregated? Following from this, should the aim of education for Black South Africans be to assist them to adjust successfully to Western spheres, or should it be to lay the foundations for separate communities? Thus, should one's object be to set free the creative forces in every individual, or to mould individuals to a pattern?

In South Africa, the historically powerful (the whites) felt impelled to arrest the ideology of development and used the education system as the instrument for carrying out their purposes. The purpose of apartheid education was to arrest, hinder, monitor, and control the "development" of the African people, recreating for the races a social order belonging the pre-industrial age (Deacon 1991). For instance, for most policy makers in the apartheid era, education was a means of artificially resuscitating previously existing hierarchies especially class and ethnic differences. In fact, in formulating the educational policy of separate development, the then Prime-minister Dr. Hendrik Verwoerd wrote:

there is no place for him (the African) in the European community  
above the level of certain forms of labor... Until now he has been  
subjected to a school system which drew him away from his  
own community and misled him by showing him the green  
pastures of European society in which he was not allowed to gaze.  
(quoted in Horrel, 1963: 7-9)

Further, he suggested that there: "has to be an acceptance of the fact that separate groups existed and in giving each group the opportunity of developing its ambitions and capabilities in its own area, or

within its own community, on its own lines, in the service of its own people (quoted in Horrel, 1963: 9-10).”

The emphasis was that education has to be turned into a general service that will help the "development" of the South Africans as a whole. However, what the apartheid authorities did is to utilize education as an instrument to maintain their dominant position.

As a result, the implementation of apartheid ideology led to a near-total separation of educational facilities based on race (Hamilton, 1987). The white minority, no matter what social class they belonged to, enjoyed a high quality of education with good facilities and well trained teachers. While the black majority, no matter what social class they belonged to, had "deficient" schools, irrelevant knowledge, less teaching equipment, poorly trained teachers, and most importantly, they depended on the white standards of what development was.

Consequently, the vast majority of the people remain impoverished. Although development implies improved housing, education, basic needs such as water and food in separate ways was to be attained, in the South African context, the African majority did not realize these? After all, the African labor feeds the industrial machines and factories of the white minority. Situating some kind of a center/periphery dependency within the state. This dependency relationship presented a picture of a growing disparity between blacks and whites as well as the opportunities and life chances.

## **Environmental Crisis in South Africa**

There is a link between the ideology of development and the environment especially in developing countries (Gottlieb, 1996; Botafogo, 1985; Nyang'oro, 1996; Neale, 1986).

Gottlieb (1996) argues that development is responsible for environmental degradation. The "hyper growth" of the West and the destruction of nature in the in Southern countries, in Gottlieb's view, is a result of Western economic imperialism whereby the ideology of development and its industrial and capitalistic emphasis are used to exploit the environment at any cost (environmental or otherwise).

To add, Jarret (1996) argues that the exploitation of Africa's environment and resources" has been responsible for Africa's development and 'backwardness' since colonial period; and continues to supply the west with resources and labor at the expense of African growth" (p.24). The apartheid government viewed the natural environment as a commodity that must be exploited at any cost. South Africa is also seen, as a dumping ground for foreign toxic wastes is not only harmful to humans but also to the entire ecosystem (Chenje & Johnson, 1996).

The effects of capitalism on the environment are enormous according to Leiss (1972). In order to produce more products, the natural resources are extracted excessively for short-term gain. This, according to Hardin (1968), creates a tragedy of the commons because a natural resource exhausted by certain members of society for short-term gain creating a shortage of that resource for other members of the same society. South Africa in this case was used as an instrument for Western advancements.

The view of nature as a commodity is based on linear "Western" concepts of the Enlightenment which deeply argues that because of human rationality and free will, humans by nature are anti-nature beings (par excellence) and must revolt against nature and free themselves from it thereby becoming authentically human. (Kant, 1929) The theories of Enlightenment are deeply rooted in the utilitarian, Judeo-Christian worldview and beliefs of how cultures relate, know, and define their environment. White's (1967) examination of the role of religion (especially Christianity) concluded that the Judeo-Christian faith assumed that humans are exempt and above nature.

Christianity, according to White (1967), enabled humans to have a supremacist worldview on their relationship with nature. Thus, because of God's divine purpose and "calling" of human's as stewards of the earth, humans must exercise their ultimate power and "dominate", or "subdue" the earth at any costs (environmental or otherwise). Human "rationality" and ability to create and design (which is unique to humans), enables and legitimizes them to civilize the uncivilized, tame the untamed for it is for their own benefit to do as such.

To achieve this task, according to Weber (1958), humans must "abandon their traditional beliefs in the magical and supernatural (or natural forces) in favor of the belief in the power of knowledge and instrumental rationality in the form of science and technology. In addition to, Horkheimer et al (1972) contends that Christianity equips humans must seek mastery of nature in order to control and predict uncertainty because "what men want to learn from Nature is how to use it in order wholly to dominate it and other man"(p5).

Therefore, using science and technology, as instruments of control, humans must abandon their beliefs in the mysterious forces of the natural and be enlightened through science and technology because of its reliability and validity. Validity through research, according to Durkheim (1972) ensures that knowledge and ways of knowing are validated and adopted as ultimate truths that will guide humans in everyday life. As a result, humans can now construct and transform reality of their natural surroundings according to what a particular society commonly accepts as reality. In other words, nature as an active, brutal and untamed force disappears from view, and is replaced by nature as a

passively constructed and human-mastered force. Thus, improving and adapting nature to their own understanding of what nature ought to be.

In summary, nature is characterized by the utilitarian tradition of human mastery over nature. In this tradition, nature is seen as a commodity or property to be exploited and partitioned into commercial holdings. Thus, because nature is vast and free of human development, it is viewed, as an instrument to be utilized and used to satisfy humanly wants, not needs. The instrumental usefulness of nature in producing goods is seen as essential for development and progress. Value is measured in terms of what contributes to the sustenance of human life. This cost and benefit analysis of nature in Knudston's et al (1995) view reinforces the assumption that nature can be reduced and measured quantitatively.

The environment with its complexity is a qualitative entity and its quality is measured through its diversity, not dollars. Therefore, the capitalist instrumentalization of nature, which the ideology of development is based upon, also justified the notion that something produces a good; it must be owned or controlled by someone. Marx and Engels' (1977) classic examination of human relations to nature suggests that the control and ownership of nature are a result of excess materialism and individualism reinforced by capitalism, reduces nature to a mere commodity. In other words, because the environment is valued in terms of the amount of goods and services it provides for humans, humans as creators of goods are justified in controlling and dominating nature through its private ownership.

### **Rethinking “Development” in South Africa: Post -Apartheid Challenges**

The intensification of the process of homogenization, control, dominance, and commodification is the real agenda of development. In the so-called “Third-World countries”, especially in Africa, the exigencies of global competition, economic growth and modernization are adopted by African governments to enforce policies that put absolute priority on limitless transitional profit making at the expense of the local needs and the environment. These policies shift resources and profit from local communities and redistribute income and property to foreign and local elites.

The present structure of the South African economic and social reality is based on a relationship, which enables the colonial (apartheid) forces to maintain control of the economic and social development in South Africa. In post-apartheid South Africa, for instance, several issues and challenges must be tackled before any rush to exploitation of the environment. Firstly, because of the legacy of apartheid, the deep economic and social inequalities, especially in terms of resource redistribution require addressing.

These mutually reinforcing inequalities are severe at several levels. If development based on the Western concept is continued, structural inequalities in the economic sector have to be eliminated (or reduced). The issues that arise as a result of inequities in economic sector include poverty, waste, water, and air pollution (McGarth, 1996). In most instances social consequences of environmental degradation are always ignored.

The second challenge and issue facing the new South African government with regards to the environment is diverse perceptions about the environment. In South Africa, with its heterogeneous society, both distinct and subtle differences in experiencing the environment can be expected between socio-economic and cultural groupings. In addition, the rich respective mixture of Western, Eastern, and African ideologies in South Africa is likely to contribute to a mosaic of ways in which people relate to the environment. Perceived environmental change in South Africa is somewhat more prominent than change perceived in the community and in the world.

The perception that change is occurring primarily in the social environment can be ascribed to the recent sociopolitical changes in South Africa. However, due to the historical significance of these changes and the intensity with which they are probably experienced, it is almost inevitable that virtually any issue (including issues that may be punctuated as environmental elsewhere in the world) are perceived through a sociopolitical lens. This implies that in any engagement in development/environment issues, cognizance also needs to be taken of the historical context of these issues.

Thirdly, there is threat of globalization and neo-liberal restructuring that the new South African government must attend. According to Pannu (1996), in examining the effects of the neo-liberal globalization and economic reforms in the educational systems of the developing countries, these policies are detrimental to developing countries because they increase political polarization, marginalization, and discontent. Equally important, the adoption of such neo-liberal policies will have a disastrous effect on the environment. This is evident when examining the widening gap of the "have's and have not's" and the diminishing possibility for meaningful democratic regulation and control over environmental policies in South Africa

Korten (1995) warns that corporate strength internationally has increasingly lead to a state of corporate dominance that promotes profitability and economic growth even when it is at the expense of basic human needs. Korten further cautions that the Western-based ideology of development "has been about separating people from their traditional means of livelihood and breaking down the bonds of security provided by family and community to create dependence on the jobs and products that modern corporations produce (p.251).

In addition, according to Lodge (1998), because political corruption is prevalent in South Africa, the environment is put on an absolute risk. The challenge lies on the new South African government to change some of its policies with regards to the environment. Instead of blaming the West for all their failures, taking responsibility for their own ideological dependency for a change might be an answer (Scott, 1998).

To conclude, the heterogeneous nature of South African society, partly reflected in class and racial differences, poses a number of challenges to the issue of environmental sustainability. This is especially so if ideology of progress and development is accepted as a legitimate ideology because of both its historic significance and also because of limited alternatives to development. In this sense, the environment might be viewed as a commodity with no intrinsic value.

As mentioned in the paper, ideologies as sets of beliefs and ideas used to evaluate and explain social conditions, provides normative frameworks for understanding the world and they may be used as a guide for political action. In this sense, action can also be taken with regards to ideological dependence. Education can be a useful tool in ensuring that citizens are empowered. Taking into consideration that people have diverse understanding about their surroundings, education as an instrument of knowledge acquisition can play an important role in ensuring that citizens are informed about the detrimental effects of the ideology of development on the environment.

Certainly, people differ with regard to some aspects of environmental experience and, although the influence of ideologies is noted, such differences may have intricate roots in different world-views and values. Such world-views and values can be empowered through locally based environmental knowledge and ideologies, especially when post-colonial governments such as that in South Africa struggle with the ideology of development based on Western form and content.

All in all, the post-apartheid government must break away from the ideological dependency of “development” and “progress” and reconnect to African knowledge about the environment, which in most cases are rooted in their cultural beliefs or understanding about the environment. Such a reconnection, however, must include not only an analysis and problematization by African scholars in academic journals, but also that this knowledge become instrumental in post-apartheid environmental policy making. The reconnection to African traditional environmental knowledge, therefore, is not a call for the revival of romantic views about the environment, but a re-appropriation and implementation of past and present manifestations of African knowledge about the environment in government policies.



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