

A.2

Key elements for addressing the global dimension of engineering

1. New visions on development and cooperation
2. The capabilities approach to human development
3. Sustainable development
4. Participation, governance and citizenship
5. Gender perspective and interculturality



A.2 Key elements for addressing the global dimension of engineering

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Global Dimension in Engineering Education

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Front Cover 'Not Far to Go'. Students on the EWB Bristol trip to the Centre for Alternative Technology trek across the Welsh countryside. Photo: S. McPhillips

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PHOTO: 'Earthen Plaster'. Bangladesh SAFE NGO works on low-cost alternatives to vernacular solutions in order to improve quality and increase longevity of earthen plasters. J. Ashbridge

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CHAPTER

New visions on development and cooperation

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1 NEW VISIONS ON DEVELOPMENT AND COOPERATION

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Universidad del País Vasco

EXECUTIVE SUMMARY

The aim of this session is to introduce a broad perspective on the historical meaning of the idea of development, and key contemporary debates around the agenda of international cooperation.

The present status of development aid will be discussed in the framework of the debates on the “Post-2015” agenda. Additionally, Development Education will be presented as a key strategy in this new context by emphasizing ideas of local-global transformations, participation and global citizenship.

LEARNING OUTCOMES

After you actively engage in the learning experiences in this module, you should be able to:

- Identify critical perspective on the idea of development and aid.
- Present an overview of the historical evolution of the Development.
- Understand development education as a strategy for a more politicized view of development.
- Identify different alternative paradigms to economic development.

KEY CONCEPTS

These concepts will help you better understand the content in this session:

- Development
- Millennium developments goals
- Education for development
- Global citizenship
- Post-development

GUIDING QUESTIONS

Develop your answers to the following guiding questions while completing the readings and working through the session:

- What is the evolution of the discourse on development?
- What are the principle criticisms on the existing concept of development?
- What are alternative approaches to the classic vision of development?
- Why is education for development is important in engineering?

INTRODUCTION

Human societies have always endeavoured to ensure self-sufficiency and the satisfaction of basic needs among all members through the implementation of various economic models for the management of resources. In more recent eras, the enlargement of national empires as a result of conquest and colonization leading to the accumulation of wealth and the expansion of markets has led to economic growth being defined as a necessary condition for the progress of societies.

The origin of one of the most significant debates on the idea of development can be traced back to immediately after the Second World War, when it was defined in relation two core elements of the era: a) the opposition between the capitalist and socialist models, as represented by what we know as the Cold War b) the process of decolonisation that, from the 1950s, led to the political independence of a number of countries (mainly in Africa and Asia) that, as a result of their colonial past, faced the future with very weak economies and serious social problems.

As evidenced by the previous examples, the meaning that has been given to the term “development” is subject to influence by the historical period, ideology, etc. within which it is employed. Nevertheless, it could be said that a factor common to all approaches is the emphasis on the idea of development as the expression of a desirable project for present and future society. In other words, the idea of development comes attached to positive connotations from the outset. It is seen as a medium- to long-term goal that will enable well-being for people in the countries that achieve it.

This image of development as something desirable, natural and universal is inextricably linked to Western rationality, which pervades the collective imagination, where science and technology are inseparably united as essential tools for the progress of society and as a guarantee of its happiness. As Juanjo Celorio (2007, p.30) puts it:

‘Modernity constructed an institution of knowledge, the scientist, with claims to neutrality and an absence of social, cultural, historical and spatial influences. This knowledge, understood as void of ideological interests in its reading of natural and/or social reality, was presented as useful for society and able to guide the desired action on the world; action that would lead to progress, social improvement and equality, human rights and the elimination of the violence and misery of the old regime.

In this way the character of the discourse, constructed in a specific social sphere and with particular interests and objectives, was hidden. It concealed its true rationale, that of a knowledge/power as a means of legitimising the dominant order. A knowledge/power built on, from, and for the perspective of the beneficiaries and

interested parties in an industrial model, the capitalist, born of and focused on so-called Western culture and impregnated with an aggressive and power-oriented androcentric perspective. In this way the Eurocentric and androcentric would become the planetary and universal paradigm, the point of reference and framework for mankind, characteristic of an exploitative and unsustainable model of industrial growth, the template for development and progress.”

In addition to the ideological or historical contexts that defined development priorities, a dominant characteristic of development priorities is their core objective as the pursuit of economic growth. This aspect of development work will be discussed further in the chapter.

The dominant discourse on development has, for a long time, been blind to gender analysis. Based on androcentric¹ positions, development policies have ignored their impact on the lives of women. Here too, as has happened historically, organised groups of women have had to denounce this neutrality and do the work of revealing its consequences, establishing indicators and defining strategies to improve the position of women in their struggle for a decent life.

One last feature we would like to highlight—amidst many others, which we will not be able to address in this text—and which is related to the Eurocentric character that permeated the dominant views of development, is the fact that the model that has for decades been proposed as the example to follow, is derived from Western experience—industrialisation, capital, free trade, the consumer society—in its successive stages, just as Rostow (1961) defined and outlined them, with a linear, almost deterministic, logic.

Fortunately, if we speak of debate on the concept of development it is because, even though proposals to limit its scope to the objective of economic growth continue to be dominant today, there have always been critical proposals that have focused their alternatives on furthering social justice and expanding freedoms and human rights for all the communities in the world.

Furthermore, development aid and development education - an approach focused on promoting critical awareness in society and providing tools for social action and transformation - have, since their origin, evolved as much as that of the debate around development itself. The aim of this text is to provide some key points to better understand this complex process.

¹ Centered on, emphasizing, or dominated by males or masculine interests

THE EVOLUTION OF DISCOURSE ON DEVELOPMENT

The Paradigm of Modernization and Its Counterpoint Dependency Theory

The international political context which existed following the end of the Second World War divided the world into two antagonistic blocs that would characterise the East-West confrontation—with the U.S.A. and the Soviet Union at the head. This was happening together with the decolonization process in Asia and Africa, a progression which involved rearrangement of the international order where Africa, Asia and Latin America represented the theatre in which the geopolitical interests of the superpowers were played out.

Their colonial past had left newly independent countries mired in a situation of social disintegration, cultural crisis, low incomes, inadequate industrialisation and economic dislocation. Although there existed notable differences between them, if anything became evident in those decades, it was the issue of poverty as the primary concern to be confronted by development policies and international aid strategies directed at the newly-independent countries as a group.

The economic growth that Western powers experienced following the Second World War was taken as the essential feature to indicate the degree of development of a country. In this way, as if it were something natural, the division between the poor world and the rich world, between “developed” and “underdeveloped countries”, as they were now known, was established. Development aid arose in this context as a means of transferring financial and technological support to enable countries of the "Third World" to get on the path towards development.

The concept of modernization is the theoretical framework upon which many of the policies concerning solutions to the problem of development implemented since the early 50s have been based. Viewed as a part of the paradigm of modernization, the problem to be solved becomes the state of "backwardness" that characterizes underdeveloped countries. Addressing this problem involved promoting changes necessary to ensure the transition from a traditional society to a modern society.

This concept, deeply Eurocentric², androcentric and anthropocentric³, is behind the stereotypical views that have populated the collective imagination of Western thought. The presentation of societies in developing societies as "primitive," "obscurantist", "unable to take

² Centered on, emphasizing, or dominated by Europe or European interests.

³ Centered on, emphasizing, or dominated by human beings.

the reins of their own destiny" is grounded in Western superiority. The world has been observed from this viewpoint since the early 1950s, which has led to the more-or-less racist charitable/aid positions that have dominated the context of international relations and many of the practices of development aid and education.

During this time, the State was seen the main agent responsible for promoting these development policies aimed at accelerating the process of transition, which in practice meant moving from an economy based on primary sector activities to more productive activities such as industry and, to a lesser extent, services. This change would trigger the economic dynamism needed to generate wealth and well-being. Nevertheless, as Gonzalo Escribano (2004:10) remarked: "*It quickly became apparent, however, that growth and industrialization were not incompatible with large pockets of poverty*".

A new theory on the causes of development arose in the 1960s and 1970s, originating from a group of analysts linked with Economic Commission for Latin America and the Caribbean (ECLAC): we now know it as "Dependency Theory", which postulated that underdevelopment is not a stage in the linear pathway towards development, but a state in itself.

This powerful idea showed how 'development' and 'underdevelopment' are two conditions in the same historical process. The development of some countries can only be explained by the underdevelopment of others. The accumulation of wealth generated in rich countries has been the result of the processes of conquest and colonization. Colonialism and imperialism facilitated the exploitation of the populations of the Third World countries and the systematic expropriation of their natural resources, raw materials and energy for the benefit of the Global North⁴.

Furthermore, the imposition of rules on international trade generated unequal exchange practices that proved detrimental to developing countries: these countries produced raw materials and (cheaper) agricultural products that were exported to the developed countries and became consumer-importers of (expensive) technologically advanced, industrial products. This generated a cycle of dependency from which it was difficult if not impossible to escape, as it established an unequal relationship between a 'centre' (rich countries) who controlled trade and financial mechanisms according to their own interests, and a 'periphery' (developing countries) relegated to play at a disadvantage.

Dependency theories increased understanding of a system of learning which became known as "education for development" (Boni and León, 2013). By underlining the importance that

⁴ The 'Global North' is a term used to refer to the economically developed countries of Europe, North America, Australia, Israel, South Africa, etc. The 'Global South' refers to less economically developed countries around the world.

must be placed on understanding the causes which explain the phenomena of development/underdevelopment and poverty as a matter of historical injustice which had to be opposed.

Building on the findings of dependency theorists, various alternative development proposals were produced. These ranged from autonomous development, disengaging from the world capitalist system, the creation of regional markets, and adequate industrialization to enable self-sufficiency in domestic markets and break foreign dependency.

These years of development practice and theory are characterized by the total absence of any kind of gender analysis in the definition of development policies. Women were considered passive beneficiaries of development (the idea that what benefits men benefits women equally) and seen solely in their reproductive capacity, where motherhood and raising children was considered their most important role.

At this time, there existed another way of understanding development (albeit without questioning economic growth as the main priority) influenced by Marxist analysis. The problem of development could be read as a political problem: it involved ending the systematic plundering of national wealth performed by imperialist powers and carried out in collusion with the internal ruling classes. Development could thus be understood as a process of national liberation against imperialism, involving taking power from the ruling classes.

This theory also believed in technological progress and in a State-planned economy. Similarly to modernization theory, it generally considered traditional peasant societies an obstacle to development. However, what differentiated a Marxist reading of development was that it focused the aim of development on social progress as much as economic growth.

ECONOMISTIC DEVELOPMENT IS FIRST QUESTIONED

In the 1970s a growing concern began to emerge within development work around combining the goal of economic progress with other development aims that would ensure the needs of people were considered. At this point, years of pushing development policies had not only not reduced poverty, but had, in fact, achieved quite the opposite outcome, with the North-South gap continuing to grow.

During the Decade of Women (1975-1985) declared by the United Nations, feminist debates about the status of women and their link to development evolved from approaches which emphasized equal opportunities for women to more critical positions that understood the gender subordination characteristic of patriarchal societies as the main obstacle against

ensuring women had access to resources and redressing power relations between men and women.

Parallel to the pioneering feminist approaches to development, other initiatives sought to emphasize the relationship between humans and the natural environment as a means of investigating the consequences of the dominant industrial model. The Pearson Report (1970) exposed the errors of the modernisation process that had led to a kind of 'growth with poverty' and drove home the idea that the generation of wealth is not the solution if it is not accompanied by policies of redistribution. Another relevant report, entitled *The Limits to Growth* and commissioned by the Club of Rome appeared only two years later and is considered the first wake-up call to reconsider the view of economic growth as a limitless process on a finite planet (D.L. Meadows et al, 1972).

However, the 1980s witnessed a return to the primacy of economic factors in measuring development. The debt crisis in Latin America and the inefficacy of the structural adjustment policies – economic policies imposed by the International Monetary Fund and the World Bank in the late 1980s in exchange for new loans to developing countries - represented another turn of the screw, exacerbating the already poor living conditions for the populations of highly-indebted countries.

This led to questioning the paradigm of modernisation as the ideal development policy. The end of the 1980s saw the fall of the Berlin Wall, and with it the gradual disappearance of the economic systems embodied by the Eastern bloc countries. At the same time, the nationalist models of one kind or another were being replaced by the neoliberal mercantilist model, which states that the economy is hindered by excessive State intervention, the solution is to minimise its role and let the private sector be the driving force. The market becomes the regulator not only of economic life, but also social, political and cultural life.. The nation-state lost power, the economy became globalised and the rising financial powers and transnational corporations started to play an increasingly important role in directing the world economy, a role which they continue to play today⁵.

Before we attempt to articulate what constitutes current critical discourse opposed to the hegemonic development model, we will review two proposals that, while not having achieved their self-determined outcomes, have made considerable efforts towards shaping development so it takes greater account of people and the planet we inhabit.

⁵ The current context, dominated by what we have called neoliberal globalisation, presents some characteristics that should be explained in greater depth, but exceed the scope of this short text.

The concept of 'sustainable development' had its precedent in the Meadows Report (1972), but it received a significant boost with the publication of *Our Common Future* (1987), also known as the Brundtland report. This report outlined the urgent need of establishing a kind of development that would be sustainable over time, to ensure that development could meet the needs of present generations, without compromising the right of future generations to meet their own needs.

This analysis originated from questioning a model of development that had promoted ruthless industrialisation, based on the consumption of non-renewable energies (primarily oil and its derivatives) and which did not take into consideration the impact this had on the environment. Increasing pollution, deforestation and the consequent progressive desertification of increasingly larger areas, the loss of biodiversity due to an abusive over-exploitation of marine and terrestrial ecosystems, the proliferation of toxic waste—including nuclear waste—and the climatic change resulting from all of this (incipient at the time, but confirmed today) were just some of the clear signs that we were facing a global ecological crisis of immense proportions.

However, sustainable development as it was presented at the time was called into question by critical voices for its reformist character (its inability to address the structural causes of 'underdevelopment') and for the lack of commitment it elicited from the international community who were unable to agree on high-impact measures, despite successive summits on Environment and Development under the auspices of the UN.

The other concept to which we referred is that of 'human development'. The Pakistani economist Mahbub Ul Haq was instrumental in defining this concept and proposed that the UNDP (United Nations Development Programme) carry out an annual report that would track the progress of countries according to a system of indicators that would allow for assessment of the degree of improvement in the lives of the people, and in the distribution of wealth. Human development measurements also take into account other equally important factors, including degree of freedom, political participation, gender equality, and assurance on human rights issues, all of which are closely interrelated. These annual reports have been published since 1990. The work of economists, such as Amartya Sen, and philosophers, like Martha Nussbaum, have given substance to this approach and have further developed its proposals (Nussbaum, 2002). This concept will be discussed more extensively in the next chapter.

THE MILLENNIUM DEVELOPMENT GOALS AND THE POST-2015 AGENDA

In 2000, the General Assembly of the United Nations held the Millennium Summit to set the Millennium Development Goals (MDGs) for 2015⁶. It was the first attempt to establish coordinated action between member states to "uphold the principles of human dignity, equality and equity at the global level" (UNGA, 2000).

The 14 years since then have seen significant progress and accomplishments in some countries and in some of the goals, but it is already evident that it will not be possible to achieve all the MDGs for 2015. Children continue to suffer from deprivation, gender inequality persists, development aid has decreased and environmental sustainability continues to be threatened (United Nations, 2013a).

Since 2012 there have been several rounds of consultations, meetings and expert panels convened to design the Post-2015 Agenda, a set of proposals for continuing the initiatives begun under the original MDG framework. The Post-2015 Agenda is being designed with a view to the challenges of the contemporary context (e.g. the economic crisis triggered in 2008) in order to better define the challenges for the future.

The final report was written by the 'High Level Panel of Eminent Persons', a consulting committee established by the United Nations to advise on the construction of the Agenda. The Panel gave a positive assessment of the MDGs but recognised that they did not focus enough on the poorest and most excluded, governance issues, encouragement towards inclusive economic growth, or sustainable development. They therefore suggest promoting a universal agenda to bring about five major changes:

1. Leave no one behind. Pay special attention to the poorest and most excluded people.
2. Put sustainable development at the core of the agenda.
3. Transform economies for jobs and inclusive growth.
4. Build peace and effective, open and accountable institutions for all.
5. Forge a new global partnership.

In March 2013, an international conference was held in Bonn, which brought together civil society organisations, activists and experts from around the world to develop produce a series of documents that addressed the challenges of the proposed Post-2015 Agenda from a critical standpoint.

⁶ The 8 MDGs are: 1) Eradicate extreme poverty and hunger. 2) Achieve universal primary education. 3) Promote gender equality and empower women. 4) Reduce child mortality. 5) Improve maternal health. 6) Combat HIV/AIDS, malaria and other diseases. 7) Ensure environmental sustainability. 8) Develop a global partnership for development.

"Any Post-2015 development agenda must be based on the principle of non-regression [...] must also proactively address the growing inequalities within and between countries, feminization of poverty, discrimination and violence based on sexual orientation and gender identity, commodification of natural resources, threats to food sovereignty, global warming, biodiversity loss, and environmental degradation [...] the Post-2015 development agenda must not be driven by the donor or corporate sectors. Rather, it must be articulated through a progressive policy framework that aims to fairly redistribute wealth, assets, and power to achieve social, economic, ecological, and erotic justice. It must also tackle intersecting inequalities and multiple forms of discrimination based on gender, age, class, caste, race, ethnicity, sexual orientation, gender identity and abilities."

EDUCATION FOR DEVELOPMENT AND THE CONCEPT OF GLOBAL CITIZENSHIP

A final contribution, in line with the other approaches questioning the dominant development model already presented, which is considered relevant to education, comes from the proposals originating in the field of Development Education (DE).

Development Education is defined as:

"...an approach that considers learning as an interactive process for the comprehensive education of the people. It is a dynamic education, open to active and creative participation, orientated towards commitment and the activity that should lead us to become aware of existing planetary inequalities in the distribution of wealth and power, their causes and consequences, and our role in the efforts to build fairer structures." (Argibay et al, 2007).

In DE, importance is given to learning, reflection, research, and evaluation of activities intended to improve quality of education practice, the generation of knowledge from experience, and accountability. However, some voices point out the lack of a greater emphasis on the relevance of DE to other areas of aid, and its coherence between the various policies.

This proposal has evolved over time, finding many adherents in non-governmental development organizations (NGDOs). DE has evolved since the first aid-based approaches in the 1950s, which focused on the ability to produce change via the "North" or through NGDOs, to the idea of a "global civil society" encompassed by Education for Global Citizenship approach (EDGC) (Boni and León, 2013). The latter has been defined as:

“...an approach, emanating from DE, that integrates education in values, encouraging participatory methodologies and promoting a series of reflective practices that cover an integrated perspective of knowledge, experience, individuals and society.” (adapted from De Paz Abril, 2011).

In this way, EDGC came to represent an essential strategy for questioning development models in both the South and the North.

Before concluding, it is fitting that we explain the concept of Global Citizenship (GC) in the EDGC approach⁷. GC has gained strength from the 1990s up to today, owing to the phenomenon of globalisation, reflected in the interdependence between markets, countries and policies. However, its roots can be traced back to the concept of cosmopolitanism proposed by the Stoic tradition, or from the Enlightenment of the eighteenth century with Kant as one of its main points of reference. Currently, some of the most relevant contributions to the idea of cosmopolitanism or GC come from Martha Nussbaum, who defines the cosmopolitan as "one who is committed to the entire community of human beings" (Nussbaum, 1999).

Nevertheless, the concept of GC has not been without its critics, who point out that the term 'global citizenship' is a Western construction, or that the concept of citizenship is associated more with participation on local and national levels. They also mention the possible so-called tension of cosmopolitan responsibility (Thiebaut, 1999), tension between the cosmopolitan condition and the firmly rooted identities of clan, ethnicity or nation which reinforce an impulse towards security. In the face of these criticisms, Nussbaum, amongst others, has stated that the ethical foundation of cosmopolitanism is to consider people as morally equal, meaning nationality, ethnicity, class, race and gender are morally irrelevant (Nussbaum, 1999).

THE SEARCH FOR OTHER SOCIAL MODELS: POST-DEVELOPMENT DISCOURSE

“Capitalism cannot be reformed. It is a murderous system that causes two serious problems. Firstly, it starves 100,000 people each day, according to UN data, on a planet that has sufficient food resources. With the money that has been given to banks around the world, American, European, Japanese banks, in the last 4 years we have been in crisis could, according to UN estimates, have paid to end world hunger 92 times. [...] And we still intend to continue with this system? You might say that we have no alternatives, we will find them, but we need to put an end to it immediately.” (Cal 2012).

⁷ For more information on the concept of global citizenship, see Boni and León (2013).

Humanity now faces a very serious social and ecological problem: social, because the competitive model represented by market-based economic systems destroys solidarity, depoliticises society, perverts the notion of democratic participation by fostering formal, delegative, weak democracies, and replaces the notion of citizens with a society of consumers; ecological, because the logic of profit, the maximisation of profit, is at the expense not only of human societies but the world's ecosystems.

We must question how natural the system is, upon whose principles the project of modernism was founded, and the collective imaginary derived from this model of capitalist development, both extractive and productivist. According to Escobar (2011) we must question the central social and discursive role of capitalism in the economy, of liberalism in the defining society and politics, and of the State as the defining power in the matrix of social organisation. To this, Orozco (2012) adds the urgency of questioning the hidden heteropatriarchial contract within this social contract.

Feminist economics:

"...principally upholds that the ultimate objective of economic activities should be the sustainability of life, understanding this as the process of expanded reproduction of life, which requires both material resources and the context of caring and affective relationships [...]. This process includes, therefore, the satisfaction of human needs, both material and emotional, in a social and environmentally sustainable setting [...]. The notion of sustainability of life is used as an antithesis to accumulation and endless profit [...]. Seeking the sustainability of life means organising the production, reproduction and exchanges, so that all life forms reproduce and live in the best conditions, in justice and equality" (Jubeto and Larrañaga, 2013, p. 10).

'Degrowth' proposals also form part of critical discourses on development. According to Taibo (2011):

"Growth does not necessarily generate social cohesion, it often results in assaults on the environment and causes depletion of resources that we know will not be available to future generations [...] Degrowth asserts that we must radically change many of the rules of the game that govern northern societies [...] for two reasons: [...] the ecological footprint has visibly grown, largely owing to northern countries; the second reason states that would be a serious mistake to link, without further examination, consumption with well-being and happiness. We can live better with less."

Finally, other approaches come to us from the ancestral knowledge of indigenous peoples, which are highly critical of the current model of development. We refer to *sumak kawsay* or

'good living' from the Quechua culture of Peru. "The idea of 'good living' is a critique of the current development model and an appeal to create a quality of life that includes both people and nature" (Dávalos, 2008). This idea is fundamental, because, as Dávalos (2008) states,

"Sumak kawsay (good living) incorporates nature into history. This is a fundamental change in the modern episteme , because if modern thought was proud of anything, it was precisely how it had managed to eradicate nature from history. In all human societies, the modern episteme is the only one that has produced such an event and we are beginning to pay the cost. Sumak kawsay (good living) proposes the incorporation of nature into history, not as a productive factor or as a productive force, but as an inherent part of the social being."

Thus, development is a process that depends on the re-politicisation of social life, the expansion of radical democracy, and the idea that the planet and its diversity are also active agents in this process. Aid can be transformative if, instead of being determined by hegemonic powers, it is built in a horizontal relationship alongside those agents with a will to change; if it looks for strategies that build social justice and equity, and if it incorporates emancipatory social movements into its work and allies itself with their struggles and fights.

For its part, education, understood as a liberating praxis, should focus its vision on an emancipating future, fostering empowering processes that people can use to recognise the multiple oppressions that affect them, and enable them to act in their environment to undertake collective strategies of social transformation, both locally and globally.

Therefore, social movements, be they feminist, environmentalist, or defense of human rights, with their history of struggles and demands, become the players capable of designing utopian projects in relation to multiple contexts, and in response to the desires and projects of each society in its own time.

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PHOTO: Practical Action

CHAPTER

2

The capabilities approach to human development

A.2

Key elements for addressing the global dimension of engineering

2

CHAPTER 2. The capabilities approach to human development

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2

THE CAPABILITIES APPROACH TO HUMAN DEVELOPMENT

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EXECUTIVE SUMMARY

What we mean when we use the term ‘international development’ is a question with no single answer - for some it signifies economic prosperity, for others, change; some people see it as liberation from oppression and for others interpret it as a ‘Western’ construct. In this paper, we explore an approach which defines development as the expansion of what people can do and be, of their real freedoms or opportunities or, using the appropriate terminology, their capabilities.

The text is structured as follows: the first part will be devoted to describing the background of the “capabilities” approach and context in which it was developed. The second part will expand upon the key concepts of the capability approach to human development: values, capabilities, functionings, agency, welfare and the democratic deliberation. The third part will discuss its operationalization differentiating between attempts that have been made to try to capture the multidimensionality of the concept through indices, such as the well-known Human Development Index (HDI) and other approaches which have extended the capabilities approach to shed light on the complexity of expanding the capabilities of people.

LEARNING OUTCOMES

After you actively engage in the learning experiences in this module, you should be able to:

- Will learn the core elements of the capabilities approach to development
- Will be able to place the capabilities approach to human development in relation to other theories of development and assess the novelty of its contribution.
- Will be familiar with some examples of its operationalization ranging from more instrumental views to others that account for the multidimensionality of the concept.

KEY CONCEPTS

These concepts will help you better understand the content in this session:

- Capabilities
- Human Development
- Values
- Agency
- Measurement

GUIDING QUESTIONS

Develop your answers to the following guiding questions while completing the readings and working through the session:

- What are the dimensions of your idea of well-being?
- What are the capabilities that you consider most important?
- Why is the agency of people important?
- What role does public deliberation have in our society?

INTRODUCTION

Let's imagine, in a simplified way, of a development vision aimed at achieving economic growth. According to this approach, the unit of analysis is the economy, be it national, regional or local. The way to measure the success of this approach is by comparing the size of the economy now and in the future. Trade-offs such as environmental protection are resolved through agreements within the framework of the free market.

A different way of understanding development is to imagine as its goal the expansion of what people are able to do or be - what we may call their real freedoms. In this view, people are at the core of the approach. A healthy economy, by allowing us to enjoy a long and healthy life, a good education, and a fulfilling job, is a way to expand people's real freedoms not an end in itself.

Let's consider the differences between the two approaches: firstly, the analysis shifts from the economy to the person; secondly, the criteria of success switches from economic measurements such as income to things that people can do and be in their lives, now and in the future. In this second approach, there are tensions between to which groups of population to focus on (the, which period of time to prioritize (the dynamics) and which aspects of people's lives we will focus on (the dimensions) (Alkire and Denehulin, 2009, pp. 23).

This paper addresses the second of the perspectives, also known as the capabilities approach to human development (hereafter CADH).

BACKGROUND TO THE APPROACH

Although the appearance of the Human Development Report by the United Nations Development Programme (UNDP) in 1990 marked a fundamental milestone for the dissemination of the concept of human development, the origins of this theory go back to the 1970s, starting with the 'basic needs approach' applied to development processes. This approach represented a shift from a purely economic standpoint as it introduced concerns about the social aspects of development: the participation of marginalized groups in the development process, the depletion of natural resources and the impact of development policies on the environment, etc. Development policies based on this school of thought emphasized the need for redistribution of the benefits of development (Chenery et al., 1974). However, as Griffin reminds us, "both redistribution from growth and basic needs continued to be addressed from a development perspective focused on consumer goods: only intended to ensure that a greater share of the benefits derived from increased production came to groups with lower incomes" (Griffin, 2001, p.28).

In the next decade, upon observing the impact of structural adjustment programs (SAPs)¹, organisations such as UNICEF began to draw attention to the need to redesign development programs to protect the poor from the serious deterioration of revenues and cuts in basic social services. This approach was termed “adjustment with a human face” and it did more than any other publication in challenging mainstream development thinking by putting people first in the planning process (Griffin, 2001, p.28).

Another relevant milestone for human development outside academia was the introduction of Mahbub UI Haq of Pakistan as a special advisor to the general manager of the UNDP in 1989. UI Haq was key to the creation of UNDP’s Human Development Report, which popularized the concept of human development and proposed indices for its measurement different from those that were employed for the measurement of development understood as economic growth. Since 1990 the HDR has been recommending operating strategies in development planning consistent with a human development approach. Together with the contribution of UI Haq, we must highlight the theoretical contributions of the Nobel Laureate economist Amartya Sen who, in our opinion, can be considered the conceptual father of CADH.

CORE ELEMENTS

The HDR provides us with a definition of human development, which is as follows:

“[Human Development is] the process of enlarging the range of people's choices increasing their opportunities for education, health care, income and employment, and covering the full range of human choices from a sound physical environment to economic and political freedoms.” (UNDP, 1992, p. 2)

The concept of CADH has changed significantly since its inception. The 2010 Report proposes that its key components be:

- The expansion of capacity and the real freedoms of people.
- Freedom defined as a process or as a means.
- Equity and sustainability across time.

There are some elements that the authors consider key components of the CADH approach:

¹ The structural adjustment programs (SAPs) are economic policies adopted to address the external debt crisis in the '90s. They follow the guidelines of the "Washington Consensus", based on economic liberalization, the predominance of market forces, the external opening and the supremacy of the export sector, with which a new mode of insertion in the world economy was being pursued.” (Williamson, 1990, p.20-21 and 1998, p.72-82).

- Its values.
- The capabilities and functionings.
- The agency of people.
- The multidimensionality of welfare.
- The importance of deliberation and public debate.

We illustrate these ideas with several examples.

The Plurality of Values

The CAHD frames development as the promotion of human values. Penz et al (2010), reviewing the evolution of thinking about human development, identified six groups of values that have been the basis for discussions on human development over the past fifty years:

- Welfare and human security
- Equity
- Participation and empowerment
- Human rights
- Cultural freedom
- Environmental sustainability

Capabilities and Functionings

‘Capabilities’ are defined by Sen (1999, p. 87) as substantive freedoms (which can be translated here as real freedoms) which enable people to lead the kind of life that they value. ‘Functionings’ are the activities that people perform and that are valued by them. The CADH approach emphasizes the importance of assessment of capabilities and functionings by the people themselves. A simple analogy: a person can have many coins (capabilities), and might choose to spend some on something they value (functioning).

It is important to understand the idea of capabilities as freedoms or opportunities. Sen reminds us that the most important thing is that people have is the freedoms or opportunities (the capabilities) to lead the kind of lives they want to lead, to do what they want to do and be the person they want to be. Once they actually have these substantive opportunities, they may choose to implement those options that they value most. They include both material things as well as people mental, physical and emotional/intellectual states. Taking the example of hunger, the capabilities measured could be one’s ability to feed oneself and become nourished (a material indicator), or to hold political convictions/opinions on the ability to access nourishing food (intellectual/emotional indicator). Similarly, the activities or ‘functionings’ people perform (and which should be measured using the CADH approach)

include the physical act of eating (material indicator) and the act of staging protests if real freedoms related to food or nutrition aren't provided.

Capabilities and functionings of people are unique: our "set of capabilities" differentiate us and are determined by three elements:

1. Personal conversion factors (i.e. metabolism, fitness, gender, reading ability, intelligence, etc.).
2. Social/systematic conversion factors (i.e. public policies, social norms, discriminatory practices, gender roles, social hierarchies, power relations).
3. Environmental conversion factors (i.e. the climate, the geographical conditions).

These three factors, plus our own personal history, determine our ability to convert commodities or resources into capabilities and functionings. With the following example we can see the importance of these elements.

Example 1. The capabilities are not the same but the results can be

Marta and Lucy are two 20-year-old Costa Rican girls. The two were involved in an international study on learning outcomes.

Marta studies in a good university of San José, with good teachers and an enabling atmosphere. In recent months, she has been studying less and has been more involved in her drama activities. This resulted in her failing an important mathematics exam on her course.

Lucia studied at a small college on the coast. She has always had a strong interest in mathematics and is very studious. Her family has decided that her older brother would receive classes with a private tutoring lessons in mathematics while she took care of household chores and caring for her little brother. Therefore, she had little time to prepare for the exam and failed it as a result.

This case shows us how social conversion factors (the patriarchal culture that exists in Lucia's family) was one of the causes of Lucia failing the test.. In the case of Marta, her failure was due to preferring to enhance her creative and artistic ability to the detriment of her studies.

It is important to point out that diversity matters when it comes to transforming available resources into capabilities and functionings; such diversity, which is motivated by people's personal characteristics and by the context in which they live, matters when determining appropriate interventions. Due to personal differences, individuals need varying amounts of resources to transform into functionings. This is key when looking after the equitable distribution of resources

We conclude this section with Martha Nussbaum's contribution, one of the key authors within the literature on the CADH approach and Sen's former collaborator. The author

presents a list of ten central capabilities for the functioning of human beings, and proposes that these are the fundamental requirements of a decent life.

A society that does not guarantee these capabilities to all its citizens, at an appropriate level, cannot be considered a just society, whatever their level of affluence (Nussbaum, 2000). Nussbaum's list has been criticized and debated within the human development research community, although it has also been praised for representing a more universalist, internationalist and social-justice oriented position. The 10 capabilities proposed by the author are presented in the following table.

Table 1 *Central Capacities for human functioning. (Nussbaum, 2000, p.120-123)*

CENTRAL CAPACITIES	
1	Life. Being able to live to the end of a human life of normal length; not dying prematurely, or before one's life is so reduced so as to be not worth living.
2	Bodily Health. Being able to have good health, including reproductive health; to be adequately nourished; to have adequate shelter.
3	Bodily Integrity. Being able to move freely from place to place; having one's bodily boundaries treated as sovereign, i.e. being able to be secure against assault, including sexual assault, child sexual abuse, and domestic violence; having opportunities for sexual satisfaction and for choice in matters of reproduction.
4	Senses, Imagination, and Thought. Being able to use the senses, to imagine, think, and reason – and to do these things in a “truly human” way, a way informed and cultivated by an adequate education, including, but by no means limited to, literacy and basic mathematical and scientific training. Being able to use one's mind in ways protected by guarantees of freedom of expression with respect to both political and artistic speech, and freedom of religious exercise.
5	Emotions. Being able to have attachments to things and people outside ourselves; to love those who love and care for us, to grieve at their absence; in general, to love, to grieve, to experience longing, gratitude, and justified anger.
6	Practical Reason. Being able to form a conception of the good and to engage in critical reflection about the planning of one's life. (This entails protection for the liberty of conscience.)
7	Affiliation. Being able to live with and toward others, to recognize and show concern for other human beings, to engage in various forms of social interaction; to be able to imagine the situation of another and to have compassion for that situation; to have the capability for both justice and friendship. (Protecting this capability means protecting institutions that constitute and nourish such forms of affiliation, and also protecting the freedom of assembly and political speech.)
8	Other Species. Being able to live with concern for and in relation to animals, plants, and the world of nature.

9	Play. Being able to laugh, to play, to enjoy recreational activities.
10	Control over One's Environment. Being able to participate effectively in political choices that govern one's life; having the right of political participation, protections of free speech and association. (political). Being able to hold property (both land and movable goods), not just formally but in terms of real opportunity; and having property rights on an equal basis with others. (material)

Agency

If capacity is the freedom of opportunity, agency is the freedom of process. Agency refers to the ability of the individual to pursue and achieve objectives they value. An agent is "someone who acts and makes change happen" (Sen, 1999).

According to Deneulin and Alkire (2009, p. 37) agency is characterized by:

- Being related to the goals that people value.
- Involving power and control, not only for the individual (individual agency) but also for the community (what a person can perform as a member of a group).
- The responsibility of the agent to want to achieve their goals.

All these elements must be considered when evaluating the agency.

Example 2. Agency and well-being may not go hand in hand

Alkire and Deneulin (2009, p. 38) illustrate the differences between agency and welfare with the following example:

"Imagine two sisters, Anna and Becca; the two live in a quiet village in England and enjoy the same levels of welfare. Both believe that the power of multinationals endangers democracy, and that governments must work more for global justice. Anna decides to go to Genoa to demonstrate against the G8 meetings, while Becca stays at home. At that time, Anna is using her freedom of agency to voice her political views. However, the Italian police don't like protesting and violate Anna's civil and political rights by putting her to jail. Anna's well-being has decreased significantly. Anna is given the option to sign a paper saying she used violence and is a member of an association of the extreme-left (which would mean having a criminal record). If she doesn't sign, she will stay in jail for an unspecified length of time. Anna, therefore, has the (forced) option to increase her well-being in exchange for reducing her agency. Meanwhile, Becca had her potential agency but decided not to use it. She is concerned about the violations of human rights and democracy, but doesn't want to sacrifice the welfare that she enjoys for these goals. "

This example illustrates that the distinctions Sen makes are important. The achievements in terms of welfare must be evaluated by the functionings, while freedom to achieve well-being must be evaluated in terms of capabilities. Focusing on the agency transcends the analysis in terms of functionings and capabilities, and needs to take into account the objectives of the agency.

The Multidimensionality of Well-Being

The CADH is inherently multidimensional and plural. It is related to different aspects in people's lives and therefore cannot be understood from a single discipline's perspective. It must therefore take into account the interconnections between different dimensions of well-being which forms a broad portrait of the human identity.

Example 3. The bicycle

A bicycle is a resource to enable individuals to be mobile: through the bicycle, a person can access different functionings. The most obvious of these is the ability to move (first dimension of well-being, but also to exercise (second dimension), enjoy the ride (third dimension), save money and improve his/her income (fourth dimension) and improve his/her health (fifth dimension).

Obviously the use of the bicycle is dependent on about personal conversion factors (for example, being able to ride a bicycle) also social (social norms allow cycling) and environmental (the immediate environment has the necessary cycling infrastructure).

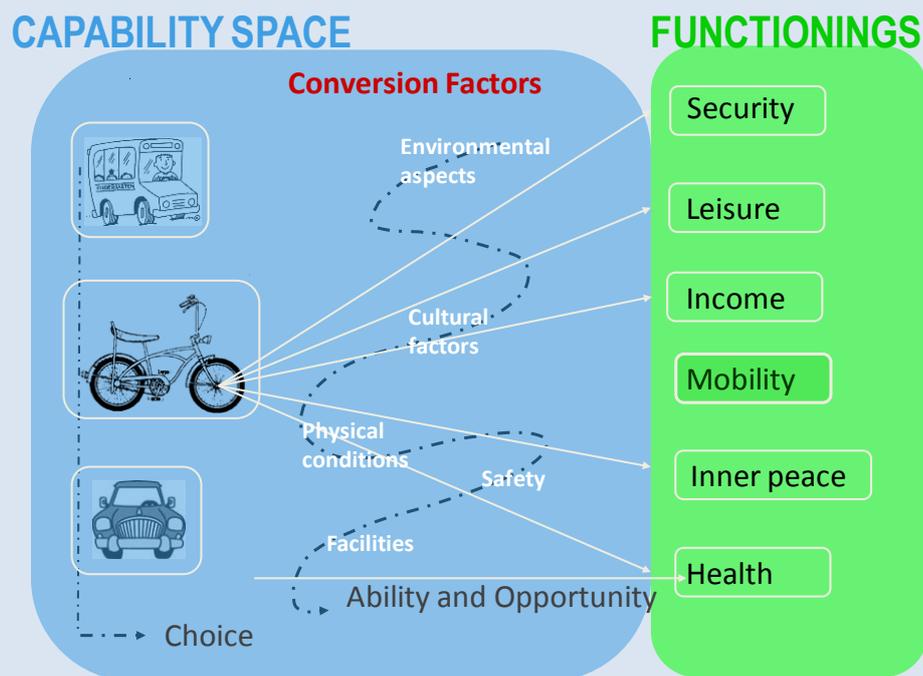


Figure: Elements of the capabilities approach to human development (Frediani, 2010, p. 179)

Democracy and the Public Debate

In Sen's thinking, deliberation, public debate and democracy are central elements to the CADH approach. It must be a priority in development policies to encourage a democratic state while the basic economic and social needs are met. Sen affirms that there have never been

major famines in an independent country that had a democratic system of government and a relatively free press. (Sen, 1999, p. 295).

There are three arguments to support the primacy of political freedom and democracy as tools for development. Firstly, political freedom, understood as the ability to participate in political and social life, is considered one of the basic human capabilities. Secondly, participation in political and social life is only of value if one is guaranteed enough freedom to engage in debate, to argue, to publicly express what is valued, to democratically elect political representatives, etc. Finally, the concept of political liberty insists that the rights that guarantee discussion, debate, criticism and open disagreement are crucial for the formation of values and priorities for development (Sen, 1999).

THE OPERATISATION OF THE CADH

In this section we will see some proposals for operatisation of the CADH. We begin with the human development indices developed by UNDP and move on to the Millennium Development Goals which draw from CADH principles. Subsequently, we will refer to two examples of implementation of ECDH in higher education, which show alternative potential applications of the approach.

UNDP Indices

The first UNDP Human Development Report presented the Human Development Index (HDI), now an established characteristic of the Human Development Reports. For twenty years, the HDI has measured the human development of countries according to three dimensions of welfare: health, education and income. Each dimension has the same weight. From the value obtained for each country, countries are grouped by high, medium and low human development levels.

In 2010, a major amendment to HDI was introduced, which saw the index adjusted to the level of inequality in a country. In a society with perfect equality, the HDI and the IHDI (Inequality-adjusted HDI) have the same value. According to the 2010 UNDP report, inequality causes an average loss of 22% in the value of HDI and can account for downgrading a country's HDI grouping (e.g from high to medium or medium to low). The IHDI shows a significantly different picture of human development in some countries, especially in Sub-Saharan Africa (UNDP, 2010, p.7).

The 2010 Report presented a new index taking gender inequality into account: the Gender Inequality Index (GII) represents gender disparities in areas such as reproductive health and labor market participation. The highest levels of inequality are found in the Arab States and South Asia (UNDP, 2010, p.7). The most recent innovation in the measurement of human

development is the Multidimensional Poverty Index (MPI). The MPI identifies multiple deprivations faced by households in health, education and living standards. An estimated third of the population of 104 developing countries, or about 1,750 million people, suffer simultaneous deprivations in several dimensions. More than 50% live in South Asia, although the highest MPI figures are in sub-Saharan Africa (UNDP, 2010, p. 8).

The Millennium Development Goals (MDGs)

We conclude this section with a reflection on MDGs and their relationship to human development. The MDGs were adopted in 2000 in the UN General Assembly in what is known as the Millennium Declaration (UN, 2000). Its formulation contains a number of indicators to measure the success of countries in the fight against poverty. Some of these indicators are listed below.

Example 4: Examples of the Millennium Development Goals

- To halve, by the year 2015, the proportion of the world's people whose income is less than one dollar a day and the proportion of people who suffer from hunger and, by the same date, to halve the proportion of people who are unable to reach or to afford safe drinking water.
- To ensure that, by the same date, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling and that girls and boys will have equal access to all levels of education.
- By the same date, to have reduced maternal mortality by three quarters, and under-five child mortality by two thirds, of their current rates.
- To have, by then, halted, and begun to reverse, the spread of HIV/AIDS, the scourge of malaria and other major diseases that afflict humanity.
- By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers as proposed in the "Cities Without Slums" initiative.
- To encourage the pharmaceutical industry to make essential drugs more widely available and affordable by all who need them in developing countries.

We can affirm that the MDGs, as well as the CADH, pose a multidimensional view of human development since they gather various aspects of people's quality of life. Despite this, both have considerable differences in their approaches. For example, the MDGs are fixed in time as opposed to the dynamic nature of the CADH; they are focused on the eradication of poverty in southern countries but do not include references to the agency of people,

expressly avoiding making reference to the overall responsibility of all countries in the achievement of goals².

Other Potential Alternatives in the Operatisation of the Approach

The CADH has also inspired other proposals in different areas of development. We will refer to only two recent examples developed in universities.

Firstly, the CADH can be used to analyze public policies, institutional performance or more specific interventions like projects or programs.

Example 5: The values of human development as inspiration for the design and evaluation of the activities of the university

Can human development values inspire university activity? Boni and Gasper (2012) use a selection of said values - welfare, participation, equity and diversity, and sustainability - to imagine a different university. Through mapping the intersection of each of these values with the activities taking place at the university (teaching, research, social engagement, governance and university environment) a number of possible dimensions are obtained that can give clues for the design of various university's activities or be used for evaluation purposes.

Another example of operatisation is the creation of contextual analysis frameworks to analyze the expansion of capabilities of specific groups. For example, in a recent paper from Walker and McLean (2013), from the study of five South African universities, the following professional capabilities index oriented to the common good are set out.

² It should be pointed out that presently (January 2014), the MDGs are in full process of discussion and debate in what is known as the Post-2015 Development Agenda. Advances in this discussion can be followed at <http://www.un.org/es/millenniumgoals/> [date accessed January 3rd, 2014].

Table 2 Central Capacities for human functioning. (Nussbaum, 2000, p.120-123)

Goal-functionings	Professional capability	Educational arrangements
Context and history: social, economic and political elements; limits and enhancers		
1. Recognize the full dignity of every human being 2. Act for social transformation and to reduce injustice 3. Make sound, knowledgeable, thoughtful, imaginative professional judgments 4. Work/act with others to expand the comprehensive capabilities ('fully human')	1. Informed vision 2. Affiliation (solidarity) 3. Resilience 4. Social and collective Struggle 5. Emotional reflexivity 6. Integrity 7. Assurance and confidence 8. Knowledge and skills	Departments: Transforming curriculum Appropriate pedagogies Inclusive departmental culture University: Culture and transforming institutional environment Criticism, deliberative and responsible Socially engaged

CONCLUSIONS

In this paper we have provided an overview of the capabilities approach to human development (CADH). We have placed its origin in criticism of purely economic development approaches and highlighted its main elements: values, the idea of capabilities and functionings, the agency, deliberation and public debate. Additionally, different implementation proposals of the approach have been addressed. Since the development of the most well-known of these, the UNDP's Human Development Index, the approach has been undergoing various modifications to become more contextual and specific. It has also been used to confront the MDGs in an attempt to show that the latter reduces the potential of CADH to rethink the functioning of institutions, public policies and, ultimately, all that relates and influences the well-being of people.

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FURTHER/SUGGESTED MATERIAL

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<http://hdr.undp.org/en> Collects all the Human Development Reports published in various languages, also includes reports of a regional character, a set of online tools and access to statistical databases

<http://hd-ca.org/> The Human Development and Capability Association is a global community of academics and practitioners, that seeks to build an intellectual community around the ideas of human development and the capability approach, and relate these ideas to the policy arena. The Association's main activities include the organization of an annual international conference, the facilitation of a range of thematic groups, and the publication of the quarterly Journal of Human Development and Capabilities, a peer-reviewed academic journal published by Taylor & Francis.

<http://www.ophi.org.uk/> The Oxford Poverty and Human Development Initiative (OPHI) is an economic research centre within the Oxford Department of International Development at the University of Oxford. OPHI aims to build and advance a more systematic methodological and economic framework for reducing multidimensional poverty, grounded in people's experiences and values.



PHOTO: 'Cooking Matoke with Tufumbe Amatoke'.
This image shows that education goes both ways.
We all learn from one another. A. Corbett

3

CHAPTER

Sustainable development

A.2

Key elements for addressing the global dimension of engineering

3

CHAPTER 3. Sustainable development

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3 SUSTAINABLE DEVELOPMENT

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EXECUTIVE SUMMARY

Despite it being over twenty-five years since the collective adoption of sustainable development as an alternative development paradigm, a great variety of interpretations of the term 'sustainability' still exist. In order to continue the development of a transformative dimension within engineering, there is a need to critically consider the global ecological crisis and better understand the various coexisting theories, approaches and perspectives on sustainable development.

This chapter covers the origin and evolution of the term 'sustainable development' and its connection with the ecological and social imbalances resulting from a lifestyle based on industrial forms of mass production and consumption, with tangible consequences (pollution, global warming, resource scarcity, energy crisis, etc.) that are affecting the most impoverished and vulnerable societies worldwide. Consideration will be given to the environmental impact of our lifestyles and to the different debts generated by the industrialized countries towards the rest of countries and societies, especially the most impoverished. This section will present some approaches and proposals from the voices of developing countries.

In an effort to define the dimensions of sustainability, a more transformative political perspective using the limits imposed by natural system as a reference will be adopted. The links between sustainable development and human development will be examined from this perspective, recognising thus the contribution of the latter to the development of the freedoms and capabilities of any person. Although originating from diverse disciplines and schools of thought, a mutual enrichment and convergence between both approaches is occurring over time

Finally, a new school of thought questioning the concept of sustainable development and promoting what is known as 'degrowth' has emerged from the postmodern critics. This chapter will review the concept of 'degrowth' as well as other alternative proposals to sustainable development.

Ultimately, this chapter will argue for a questioning of the engineer's role in our present ecological crisis and for the introduction of such critical thought processes into engineering studies. What possible can engineering make, from a sustainability perspective, in order to avoid ecotechnocratic approaches which do not challenge the prevailing attitudes towards natural resource consumption and environmental sustainability?

LEARNING OUTCOMES

After you actively engage in the learning experiences in this module, you should be able to:

- To identify different discourses, images and approaches related to sustainability.
- To critically assess look critically at the discourses and actions of different actors and stakeholders within the current ecological crisis.
- To develop a political description of the concept 'sustainable development'.
- To understand alternative proposals challenging the concept 'sustainable development'.
- To understand opportunities for the introduction of sustainability principles into individual and organizational practices, especially in the field of engineering.

KEY CONCEPTS

These concepts will help you better understand the content in this session:

- Ecological crisis
- Sustainable development
- Ecological economy
- Environmental economy
- Degrowth

GUIDING QUESTIONS

Develop your answers to the following guiding questions while completing the readings and working through the session:

- What are the connections between different interpretations of sustainable development and economic approaches to development?
- What dimensions of sustainable development proposed in this chapter can be considered in a more comprehensive and transformative way?
- How can sustainable development be linked to human development?
- What are the main criticisms of the concept 'sustainable development', especially from a 'degrowth' perspective?

INTRODUCTION

Engineering has provided a number of ways for human societies to lead better lives. However, a distinct feeling of optimism on the benefits of technology (“techno-optimism”) combined with economic models based on capital-intensive production and a disregard for social and environmental impacts, have led over recent decades to an exponential increase in pollution and the irreversible degradation of the planet.

In order to address the issue of sustainability or sustainable development, it is necessary to consider the degradation of our global environment. The concept of sustainable development has its roots in environmentalism, with the observation that the ecological limits of our environment were being exceeded. Most still use or associate the term with this environmental bias. This chapter covers different interpretations of sustainability and discusses the implications of these.

THE ORIGINS OF THE CONCEPT

Use of the term ‘sustainability’ first appeared in the 18th century, within the framework of ‘physiocracy’, an economic theory considers natural factors as an integral part of wealth production. However, the subsequent economic theories of men such as Adam Smith and David Ricardo, which stated that industrial and financial wealth was independent from ecological factors, had a much more significant influence on the collective thinking in economics (Calabuig, 2008). In the 19th century, the roots of what we consider to be an ecological economics approach were developed by Russian and Eastern economists such as Podolinsky, Ruskin or Geddes. More recently, the term ‘sustainable economy’ was introduced by authors such as Daly and Erlich, alluding the ‘need to provide an economic system that would be stable and steady concerning the consumption of natural resources, progressive regarding moral and ethical aspects as well as human knowledge and technology applications, and fair in terms of distribution’ (Llobera 2001, in Calabuig, 2008). Like the theories of physiocracy before them, this attention to environmental factors in economic analysis gained little traction within contemporary economic thought due to prevalence and popularity of classical approaches.

Some groups were more sensitive to this growing degradation of natural goods, and the environmental movement increased over time. According to their judgement, the capitalist economic system was directly to blame for detrimental environmental phenomena like pollution, overexploitation of natural resources, climate change, etc.

The presentation of the report entitled ‘The Limits to Growth’ to the Club of Rome in 1972 was an influential event. one of the most influential event. Within the report, the Club of Rome examined the evolution of some of the basic demographic parameters for planet Earth

(population, natural resources, industrial production and pollution), and created a predictive model on the global climate conduct of the planet. The methodology used to complete the report was developed and run by MIT scientists, and for the time was extremely complex.. The report was a landmark event because of its findings: the study pointed out the physical constraints to growth and concluded that the above-mentioned planetary variables would collapse by 2050. These predictions were branded extreme and alarmist at the time, and detractors pointed out that they were based on a mathematical model that, while sophisticated and advanced for the time, did not fully capture the complexity of the Earth's climate systems, thus introducing doubt as to the validity of the results. Nevertheless, the report did succeed in raising public awareness around the devastating effects of production and consumption patterns on the planet.

At the United Nations Conference on the Human Environment held in Stockholm in 1972, the international community met for the first time to analyse global needs in the field of development and environment. Although the causal or correlational link between development and environment was perceived to be weak at the time, there was evidence enough to confirm that it was necessary to change the implementation of economic development policies (Mebratu, 1998, p. 500).

But it was not until the late 1980s - specifically, the publication in 1987 of the report 'Our Common Future', commonly known as the Brundtland Report (WCED, 1987) - that the term sustainable development, referring to developing nations and the environment, began to take hold at the global level. The United Nations World Commission on Environment and Development (WCED), set up for the purpose of producing the Brundtland report, concluded that ecological and social failures showed common causes and required thus common responses (Kemp et al, 2005, p.13).

Some authors emphasise that major progress in the new conceptual perspective on development and environment was generated by the World Conservation Strategy, published in 1980 (Tryzna, in Mebratu, 1998). This strategy gave particular emphasis to the concept of conservation as a framework to discuss development and environment. The definition of sustainable development is not explicitly addressed in this document, but the concept of sustainability is recurrent throughout it, as well as the idea that economic growth should not damage ecosystems.

Prior to the World Conservation Strategy was the ecodevelopment proposal from the United Nations Environment Programme (UNEP). This model, authored by the Polish socioeconomist Ignacy Sachs, considers that each region requires specific solutions to their particular problems in accordance with their specific cultural, social and ecological characteristics in order to ensure that the needs of local communities are met.

At our present stage of environmental concern, it is important to highlight several events over the past few decades which have been paving the way for further discussions. Several summits and documents globally ratified, such as the United Nations Millennium Declaration, make it possible to better understand the crosscutting nature of the multilateral sustainability agenda (Barton, 2006). In the 1992 UN Conference on Environment and Development (the Rio Summit), special attention was given to development and the environment and subsequent summits have focused on specific issues such as population, poverty and social deprivation, gender inequality and urbanization, among others. Currently, and due to the growing global consensus on the origins of climate change, conferences or 'climate summits' are becoming more frequent and more relevant. Because of its proximity, the 2012 Conference on Sustainable Development, Rio+20 is worth mentioning, although it could be argued that no substantive or shared progress was made on a worldwide sustainability goal.

VOICES FROM THE SOUTH

Much of the literature engaged in conceptualizing sustainability emanates from the 'developed' countries and within an anthropocentric perspective showing a clear cultural bias. Our way of seeing the world, or 'worldview' (Byrch et al, 2007) should not prevent us from examining other potential solutions when talking of sustainability.

Take the issue of 'ecological debt': an idea from countries in the South aimed at introducing into the analysis the 'debt' of the wealthy and industrialised countries towards the least developed ones (Roberts and Parks, 2009). Ecological debt calculations try to better understand and determine the real global debt caused by the production and consumption patterns of rich societies. Ecological debt includes carbon debt from industrial production, biopiracy, trade of waste or natural resource extraction – all activities used primarily by industrialized countries to support their populations' current levels of consumption. To paraphrase Goeminne and Paredis (2010), the ecological-debt paradigm would allow us to open political space to certain realities of unsustainability that remain hidden from a Western point of view.

The alternative proposals from the South to the Rio+20 summit (Rio+20 People's Summit, 2012) is an example of action by civil society organizations and communities from poor countries. Differences between these and the recommendations from the official Rio+20 reports are quite noticeable in terms of approach or contents (United Nations, 2012). The search for alternative points of view should also be taken into account when talking about sustainability.

CRITICISMS OF THE BRUNDTLAND REPORT

While the Brundtland Report includes valuable proposals, especially in terms of analyzing the interactions and cause and effect mechanisms between resource-use in rich countries, poverty in the South, destruction of the biosphere, as well as introducing ideas around the inequity of current development model and the need for intergenerational justice (Sen, 2013; Meadowcroft, 2000; Riechmann, 1995), it has been criticised due to its inconsistencies and ambiguities.

The most widely accepted definition for sustainable development, which came from this report, has often been decontextualized and interpreted under non transformative approaches, although some authors like Amartya Sen (2013) recognize precisely the worth of ambiguity of definition by arguing that people, as agents for change, need a notion of sustainability that is wide enough to enable subsequent articulations. Considering the great influence exerted by this report in sustainable development discourse, it is important to present some of the criticisms, so the definition is not interpreted simply as the most appropriate one for sustainability.

Sustainable Development

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

The Brundtland Definition contains within it two key concepts:

- the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given;
- the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs.

[...] In essence, sustainable development is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development; and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations (WCED, 1987: 67 and 70).

In general, criticisms of the definition of sustainable development contained in the Brundtland Report and in ecotechnocratic (or technocentric, as expressed by other authors like Byrch et al, 2007) sustainability in general focus on the following issues:

- It needs to become unambiguous in order to become operational, and to produce a real alternative for action.

- Is it possible to define needs for future generations? Is it really possible to meet all current needs? To whose needs does the definition refer?
- Sustainable development shouldn't enable the North to impose its agenda to the South, but rather for participatory approaches to development practice.
- In the wealthiest countries, commitment to the so-called international equity is notably weak (Meadowcroft, 2000). Therefore, any environment management approach requires facing the issue of wealth distribution. Beyond proposing purely technical solutions to current unsustainability, sustainable development should strongly address political and social-justice related issues, especially as related to economic wealth.
- The economicist development model based on capital is wrong to put aside several dimensions and not addressing interconnections in an appropriate manner (Kemp et al, 2005), however, it seems that the only statements in the report made by businessmen and politicians is that economic growth is required to achieve sustainable development, both in the North and in the South. (Riechmann, 1995).

DIFFERENT ENVIRONMENTAL APPROACHES, BUT... ANYTHING GOES?

Sustainable development has thus different meanings depending on the intellectual, cultural and ideological parameters used to analyse it, and this raises questions regarding what are the aims to be pursued within sustainable development projects, how they should be adapted to the different socioeconomic contexts and how the commitment to this alternative development should be transformed (Font and Subirats, 2001). It is relevant to speak in these terms since, as it will be shown in the following chapter, deliberation should be an essential element to move towards development models which are less predatory of natural environments and more equitable.

When developing the concept of sustainability, it is necessary to be aware of and take into account the existence of at least two important schools of thought that are currently addressing the environmental question: Environmental Economics and Ecological Economics. The first school has expanded the frontier of the neoclassical economic paradigm by incorporating environmental concerns into its analyses. In essence, it has expanded the frontiers of consumption options (Redclift, 2000); it positions itself as value neutral and conducts an economic analysis with a particular view of human nature and social relationships. The Brundtland Report's influential definition of sustainable development would be part of this school of thought, disseminated by authors like David Pearce. The current green economy proposals also based on these grounds.

Some authors (Redclift, 2000; Rist, 2002) think that the term sustainable development has been generated under a very particular view of the world and the relationships within it, and

that it can even be considered an oxymoron (contradictory in its practices rather than in terminology). They argue that sustainable development concept emerged as a consequence of the devastating environmental and social effects of neoliberal development principles. The breadth of its definitions was key to achieving its broad acceptability since it can be applied to different situations, although it raises many difficulties for operative efficiency. It is also flawed because it does not really put to question the real roots of unsustainability.

Therefore, the so-called 'ecotechnocratic' school of thought within the most orthodox economics embraces the term sustainability in its discourse under the assertion that economic (here used to signify unlimited) growth is compatible with sustainability. This is one of the most important criticisms against the Brundtland Report's definition and one of its major contradictions: it promotes economic growth policies as a viable means to eradicating poverty and stabilizing the global ecosystem, while it is precisely these which have deepened inequalities and degraded environment (Rist, 2002; Meadowcroft, 2000; Naredo, 1996; Bermejo, 2001; Llobera, 2001). Engineering is integral to this approach, since it tends to focus solutions on corrective, rather than preventive, measures and on the assumption that efficiency through technological innovation will allow 'the same, and even more, to be done with less'.

Many economists believe that the environmental issue will be solved when the level of production and income generates enough surpluses to increase investments in environmental protection (Naredo, 1996). This is the classical idea that a raise in production and income will increase prosperity amongst the most vulnerable. It has been repeatedly demonstrated, however, that the market system does not undertake by itself any distributive function. On the contrary, in many cases there is evidence for productive and consumption patterns to be highly aggressive *against* the environment, since they rely on corrective actions and compensating measures for protecting the life of future generations. In order to be sustainable, human economy requires compliance with the principles of the economics of nature. The main idea of ecological economics is based on this, emphasizing that the economy should not be above nature or stand beyond it, but within the ecological system, connecting thus with natural sciences (Naredo, 1999; Bermejo, 2001). From this perspective, decoupling natural, economic and social aspects, as well as the tendency of equating development with economic growth, contribute to unsustainability.

Some authors, such as Mark Roseland, Kerry Turner or Jose Manuel Naredo go so far as to differentiate two perspectives on sustainability: weak sustainability, more closely related to the orthodox view of economics; and strong sustainability, formulated from the rationality of physics, thermodynamics and economics of nature and ecology (Naredo, 1996). The analysis of weak sustainability reveals the economic assumption that both natural and man-made factors are replaceable (Turner, in Byrch et al, 2007): that the former can be used with the restriction of being able to provide enough investment to allow for an equivalent

allocation for the next generation (Rees, in Roseland, 2000); that man-made capital can be turned into natural capital, ignoring the irreversible processes of nature; and that technology and international trade will permanently ensure enough resources to meet human needs (Ross, 2009).

On the other hand, strong sustainability stresses that a minimum stock of natural factors is required for any man-made factor in order to ensure sustainability (Daly, in Roseland, 2000). Ideologically, principles of ecofeminism, ecosocialism and ecotheology are linked to the strong interpretation of sustainability.

From these definitions, we can see that the technocratic school of thought is part of the weak sustainability paradigm and the Brundtland Report's definition of sustainable development promotes this approach. And here, the questioning of the role of engineering – frequently presented as neutral or impartial - in promoting one or another category of sustainability should be raised again.

IMAGES OF SUSTAINABILITY

As result of the ambiguity of the term 'sustainable development' and the different economic approaches underlying it, there are currently hundreds of definitions in use as well as a large variety of interpretations of these. Different interpretations are also mirrored in the images of sustainability: either decoupling economic, social and environmental elements or recognizing that it is impossible to place economy outside the sociocultural, political and natural systems, as mentioned above. Images of sustainability are an interesting educational resource as a tool for discussion and analysis, as they help to conceptualize epistemological and interpretive frameworks.

Figure 1 shows the three key elements that are often used to explain the concept of sustainable development, considering both the aspects related to human wellbeing and the physical elements required.

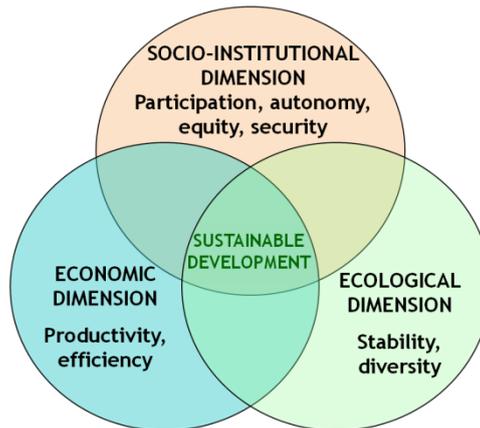


Figure 1 Classical image of the sustainability concept (Burgwal, 1999, in Calabuig, 2008)

Some authors criticise this vision because it is based on recognizing that there are three separate systems (social, economic and social). This type of models suggest that, given their independent nature, they should be treated independently (leading thus to reductionist interventions or practices). It also suggests that sustainability is only reached in the intersection between the three dimensions, thus implying that the other areas are contradictory or mutually exclusive. Finally, this conception implies that as as the ultimate goal is to fully integrate social, natural and economic systems, then this should be achieved through integrating social, natural and economic objectives (linear thought). The interpretation of sustainable development from an orthodox economics perspective would align with this image of sustainability (Calabuig, 2008).

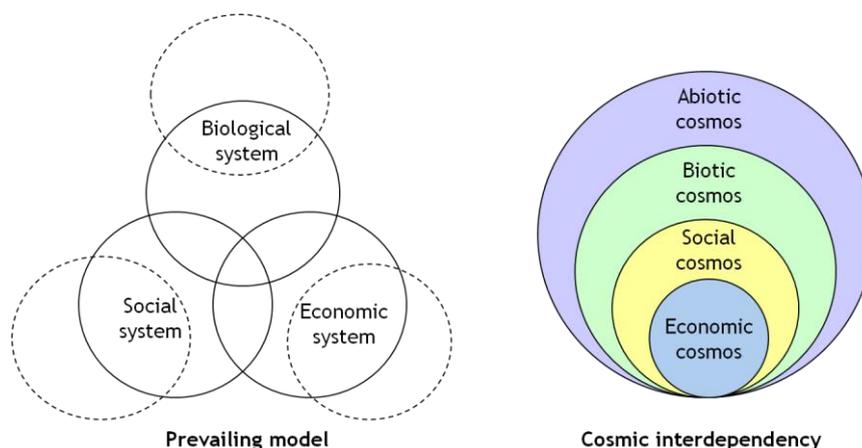


Figure 2 Cosmic perception (Mebratu, 1998, p.513)

THE 'COSMIC INTERDEPENDENCE' MODEL

The proposal of the so-called 'cosmic interdependence' model would overcome the above listed weaknesses of the sustainable development model for several reasons:

- The human universe (specifically the economic and social one) can never be separated from natural universe (see Figure 2).
- There are millions of combinations of conflict and harmony in the intersection area of the four cosmos (Mebratu, 1998, p.513-514). The graphic representation of the cosmic world is aligned with the assumptions of ecological economics, since it doesn't consider the economic system as separated from the natural one.
- It also supports worldviews such as the concept of *Buen Vivir* (good living) proposed by indigenous cultures in Latin America¹.

Another interpretation of sustainable development highlights a fourth element: institutional, representing the formal and non-formal institutions that influence and organize social behaviour at different levels. Meadowcroft, Farrell and Spangenberg (2005) capture this idea in the so-called 'sustainability prism' (Figure 3), where the activity in the institution dimension is demarcated by the 4th vertex. In line with this reasoning, sustainability requires innovation within the governing institutions and sociotechnical systems (Kemp et al., 2005). The various representations of sustainability, as shown in the prism, should acknowledge overlaps and interdependencies between dimensions, since the ultimate goal is to make decisions that strengthen the whole in a lasting way.

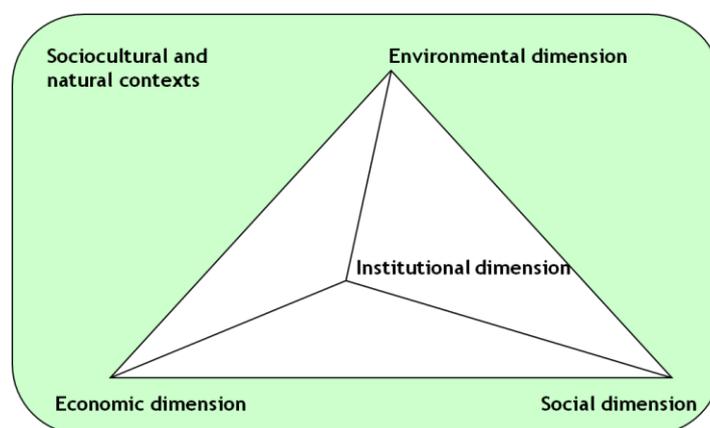


Figure 3 Sustainability prism (Meadowcroft et al, 2005, p.9)

¹ More information: <http://www.ecuadordebate.com/wp-content/uploads/2013/06/Ecuador-debate-84.pdf>

PROMOTING A SUSTAINABLE HUMAN DEVELOPMENT

At this point, it is possible to think: 'If the concept of sustainable development can have such radically different interpretations, then is it a useful tool?' The answer is yes, but not all interpretations of sustainability are equally valuable. The best are those which favour a strong sustainability that challenges current production and consumption models. Indeed, to offer a full characterization of this concept is certainly complex, since it should be addressed from multiple disciplines (ecology, economics, ethics, political science, sociology...), each of them affecting a particular issue, from biodiversity to distributive justice.

Early efforts to make the concept sustainable development operational focused on economic and environmental dimensions, but evidence in recent years suggests a greater interest in taking the social dimension into account in the implementation of sustainable development projects (Froger et al, 2004). This is driven by an increasing awareness that sustainability problems cannot be solved solely by scientific knowledge (Selman and Parker, 1997).

In general it is agreed that definitions of sustainable development should include the following elements (Meadowcroft, 2000; Kemp et al, 2005; Naredo, 1996):

- To consider jointly the economic, sociocultural, political, institutional and environmental factors (usually presented as independent systems) and to be grounded on a strong ethical basis, since it is essential to discover, clarify and understand the values that are required to move towards sustainability. An economy contributing to sustainable development is aware of interconnections between economic behaviour, pressures on environment and social impacts. However, the goal is to identify these interconnections and make decisions that strengthen them (the bond points) globally, rather than to look for a balance or "fair" treatment for each of them. (Kemp et al, 2005: 15).
- To be based on a sound ethical background that respects culture diversity as the key for interpreting life (Naredo, 1996). Also, emphasis should be given not only to aspects concerning protection (of physical environment, cultural diversity, etc.), but also to aspects related to creation or innovation for achieving a world with more justice (Kemp et al, 2005). Diversity - sociocultural, economic, technological, and environmental - would be thus considered both as source of knowledge and driver for evolution.
- To focus attention on social issues as essential elements of the sociopolitical dimension, but also on democratic governance and civic participation. This aspect should be increasingly considered when making decisions on environment and development.

- To identify common but differentiated responsibilities between rich and impoverished countries. Also, to establish co-responsibility not only between regions but also between levels (regional, national, local, individual).
- To reform government structures and procedures so as to integrate the resolution of environmental issues into the branches of the public administration. Sustainable development should not affect only one administrative department, but it should be mainstreamed in all the institutions.
- To begin and enhance strategies and planning processes concerning the environment and sustainable development. To make efforts in order to equate biophysical and social interdependencies with analytic and regulatory strategies based on a multidisciplinary, multisectorial and multijurisdictional basis.
- To endeavour to use measuring mechanisms for environmental effects and to control political impacts (usually through indicators).

The following dimensions refer to what is termed 'sustainable human development' (Calabuig, 2008; Calabuig, Peris and Ferrero, 2009), an attempt to integrate the contributions from human development and sustainable development. This list is not intended to claim universal validity, but to serve as a framework. The order does not refer to any hierarchy nor does it express levels of significance. Furthermore, the defined dimensions are highly interconnected, but they are presented separately in order to facilitate analyses in specific contexts (Figure 4). They are particularly intended to be implemented at the local level, since it is the closest level to citizens enabling deliberation and decision-making processes.



Figure 4 Proposal of sustainable human development dimensions (Calabuig, 2008)

Under the framework of the human development approach, freedom may play a key role both in determining the purposes of sustainability and in identifying the means to achieve it by working through values and institutions. It may be especially relevant to recall the general role of public discussions and participation as these may be crucial for the behavioural change that is required (Calabuig, 2008).

ALTERNATIVE PROPOSALS

Finally, this chapter could not be concluded without mentioning alternatives, proposals and approaches that are currently very relevant and challenge the prevailing economy-focused development model. Among them, the concept of ‘degrowth’ (disseminated by Serge Latouche or Carlos Taibo) is an important idea. There are also, as stated above, some more biocentric approaches from indigenous communities in Latin America or Africa with valuable contributions.

‘Degrowth’ makes sharp criticism of sustainable development, considering it a weak view of sustainability and oxymoronic in its practical implementation. Rooted in the works of the mathematician and economist N. Georgescu Roegen, this ‘shell’ concept, as it is called by its promoters, criticizes economic growth and productivism due to the accelerated consumption of natural resources involved (Latouche, 2008).

A short explanation regarding the list of dimensions encompassing degrowth is presented below (Figure 5).

Table 2 *The 8 Rs of degrowth (Authors elaboration based on Latouche, 2008)*

Dimensions	Description
Revalue Reconceptualise	To replace global, individualistic and consumerist values by local, cooperative and humanistic ones. To leave the prevailing imaginary. Specially aimed at a new view of lifestyle, quality of life and sufficiency
Restructure	To adapt production structures and social relationships according to a new scale of values.
Relocalise	A call for self-sufficiency at local level in order to meet priority needs by reducing transport consumption
Redistribute	Regarding wealth-sharing.
Reduce Reuse, Recycle	From a consumerist lifestyle to a simpler one. To extend the lifespan of products, avoiding thus consumption and waste.

CONCLUSIONS

If a sustainable (human) development perspective is to be adopted within engineering, the classical understanding of wealth and capital in terms of meeting basic ecological and human needs through technology should be reviewed. If great global challenges are to be faced, corrective measures are not enough. A process of deep change at political, social, economic, institutional and technological level, including redefining relationships between developed and developing countries, will be thus necessary. Growth should be challenged as an indisputable economic policy objective. Against this backdrop, technology or engineering models that are being currently transmitted should be reviewed to determine whether they can be used to justify the erosion of natural goods (Ross, 2009).

Sustainable development is not to be established as a fixed state, but as a continuously evolving process, open and unfinished. Assuming that problems and needs related to change always arise, and according to Meadowcroft and contributors (2005, p.5), sustainability should be defined as a process of ongoing social progress or as a framework, rather than as results to be achieved or a final status. If sustainable development is considered more holistically, then it will be a concept and also a goal, a long-term-view process and a strategy (Adomssent, 2007, p.385). Through this ongoing process win-win situations will not always be achieved, so deliberation, negotiation, and discussion processes should be relevant elements in the transition towards sustainability. In the next chapter, the meaning of participation and governance for sustainable development, understood in its strongest sense (strong sustainability), will be deeply explored.

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- International Institute for Sustainable Development: <http://www.iisd.org/sd> [February, 2014]
- Paul Aries official website: <http://paularies.canalblog.com/> [February, 2014]
- Economy for the common good movement: <http://www.gemeinwohl-oekonomie.org/en/content/common-good-communities> [February, 2014]

More resources:

Ecological footprint: an educational resource. This is an interesting resource of great educational value to think about personal habits or lifestyle. Conceived for countries and cities, it can also be applied to individuals.

- <http://www.footprintnetwork.org/>
- <http://myfootprint.org/>
- <http://www.earthday.org/footprint-calculator>



PHOTO: 'Introducing a Concept'. A community development officer of the Laos People's Democratic Republic explaining the opportunity to install a Solar Lantern Rental System. S.Gross

4

CHAPTER

Participation, governance and citizenship

4

CHAPTER 4. Participation, governance and citizenship

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4

PARTICIPATION, GOVERNANCE AND CITIZENSHIP

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EXECUTIVE SUMMARY

Participation has been considered a key element of both human and sustainable development processes. Consequently, this session is aimed at exploring the implications of this complex and controversial topic. Departing from previous conceptions of participants we will explore the main concerns, discourses, categories and spaces of participation. We will try to understand participation as a way of exercising citizenship and deepening democracy. To accomplish this, we will draw on the notion of democratic governance and we will explore the different kinds of powers that shape it.

LEARNING OUTCOMES

After you actively engage in the learning experiences in this module, you should be able to:

- Recognize participation as a key element of sustainable human development.
- Define democratic governance and acknowledge the implications of power relations.
- Link participation with the notion of citizenship.

KEY CONCEPTS

These concepts will help you better understand the content in this session:

- Participation
- Democratic governance
- Citizenship

GUIDING QUESTIONS

Develop your answers to the following guiding questions while completing the readings and working through the session:

- What are the underlying assumptions and meanings associated to the notion of participation through the history of development thinking?
- What different forms and functions may participation play in a development process?
- How can we define democratic governance?

INTRODUCTION

Participation is one of those words that have become an essential part of the vocabulary of the theory and practice of development. It is a 'trendy word' that has progressively gained prominence in all areas of development and nowadays is a central element to legitimizing both theoretical approaches and practical interventions. However, the concepts and motivations behind participation practices have changed radically throughout the history of development, taking on very different meanings that various actors have attributed to them.

Cornwall and Brock (2005) showed us how words that once spoke of politics, power and emancipation, have been reconfigured to service supposedly apolitical universal development "recipes" that contribute to making development interventions more effective and efficient. This has undoubtedly contributed to the expansion of participation practices but has done so at the cost of transforming its meanings and blurring its conceptual boundaries. It can be said that participation has become part of the network of interrelated concepts (such as governance, empowerment or poverty reduction) which, due to their high emotional impact and imprecise definitions are captured by agencies and development organizations to support their practices. It is precisely that capacity for seduction, with the malleability of its meaning, which installs concepts such as participation at the center of development discourse.

Using these terms uncritically, however, means that issues central to development practice (such as power relations) aren't taken into account during development interventions. Thus, some authors like Cooke & Kothari (2001) speak of participation as the new 'tyranny of development', using this term to describe the phenomena of participation spaces tending to reproduce within themselves the existing power relations in society. Without critical analysis and implementation to avoid this phenomenon, participatory practices not only lose their transformative potential but also turn out to be instrumental in the consolidation of the status quo. In response to this, others (like Hickey & Mohan (2004) and Gaventa (2006)) call for the re-politicization of the idea of participation and for it to recover its transformative potential by linking it to the notion of citizenship and contributing to the deepening of democracy through participatory governance systems. In this sense, participation is no longer understood as a tool to make development interventions more efficient but as a process for resolving social conflicts democratically.

Understanding the meanings that the word participation has acquired in the world of development requires placing it in context, to view how the different interpretations arise at different times, in different socio-political processes and in response to different problems. This is what we try to do in this text. First, we will confirm that the concerns and discourses related to participation are very diverse. Subsequently, we will take a historical perspective to try to clarify the different meanings of participation in the socio-political and historical

frameworks in which they have been developed. We believe that this effort to clarify the continuities and ruptures in the meanings of participation is crucial to adopting a critical perspective that allows us to develop its transformative potential. As Cornwall & Brock affirm (2005, p.1056), “If words make worlds, struggles over meaning are not just about semantics: they gain a very real material dimension” (Cornwall & Brock, 2005, p.1056)

WHAT DO WE MEAN BY PARTICIPATION?

A definition of participation

Even though participation is a controversial concept, we choose a definition that allows us to clarify its content in order to build on in later sections. In this regard, we rely on Leal & Opp (1998-1999, pg. 7-8) to understand participation as

“The process which facilitates the permanent ability to identify and analyze problems, formulate and plan solutions, mobilize resources and implement them in all areas of people’s development needs as they seek to gain control over the processes which affect their lives”.

However, to fully grasp its meaning this definition should be placed in the political, economic and cultural context in which participation unfolds. Thus, participation should be thought of as “produced by historical processes in which collective actors (civil society, state and other) negotiate relations in a pre-existing institutional terrain that constrains and facilitates particular kinds of action.” (Houtzager et al., 2003, pg. 29). This understanding of participation recognizes that social, political and economic institutions change in many ways, and that this affects how people organize themselves to engage in collective tasks.

Concerns and discourses: why participation?

At present, various users of participatory practices cite different concerns, motivations, or reasonings for adopting its use. Blas and Ibarra (2006) present a range of concerns underlying current participatory practices. Among them we can highlight:

- **Legitimation and general interest:** Given a lack of legitimacy of politicians and institutions, leaders can use participatory mechanisms to restore trust, through allowing individuals to be heard and express their demands. Direct democracy appears as a powerful complement to representative democracy.
- **Efficiency and Appropriation:** If users of certain public services participate in their design as well as in their implementation and management, the services will run more efficiently because they respond better to the needs of users. From this point of view, participation is a strategy for improving the quality of

public services.

- **Equality and Diversity:** Representative democracy is not fully equal in terms of power, creating situations where certain social groups are never present in decision-making spaces. Participatory processes are appropriate tools to prioritize the presence of underrepresented groups.
- **Citizenship and democracy:** From this perspective, participation is the space where citizenship is constructed. It's about a view of participation that is essentially political and constitutive of the idea of citizenship and democracy.
- **Radical democracy:** Departs from a critique of liberal and deliberative democracy, believing that these mask the differences and the power relations between class, race, gender, ideologies and worldviews. It understands participation as a strategy for creating spaces of self-management in a cultural struggle of counter-hegemonic character.

In the field of development, there are two main discourses that have helped spread and legitimize the idea of participation. **Human development** puts freedom as the main goal of development, but also as the fundamental means. Therefore, it considers participation as an intrinsically valuable element in the sense that political freedom is an essential part of human freedoms, and participatory mechanisms allow individuals to take part in decisions that affect their own lives, thus exercising a central part of their freedom. This in turn allows for the achievement of better results in terms of human development while contributing to the construction of social values through deliberative processes (Deneulin, 2010). **Sustainable development**, in its extended version, emphasizes the role of participation as a process of consultation and consensus building, in which the authorities should learn from citizens and local, civic, community and business organizations in order to acquire information needed for formulating the best strategies to ensure ongoing development

Spaces of participation

All this leads to the understanding of participation as an idea in construction that usually materializes in three areas that intermingle and interact. According to Blas and Ibarra (2006), these areas can be defined as follows:

- **Civil society:** The area of organizations, associations and social movements is a key space for citizen participation insofar as they are able to articulate demands and build alternative viewpoints to confront official views about problems. For many, true political participation can only be established with organized, strong, and democratic civil society.
- **Political institutions and public administration:** Sometimes, incorporating social actors in the decision spaces is the initiative of the administration itself in response to some of the concerns expressed in the previous paragraphs. Thus,

formulas are established (such as participatory budgeting, participatory planning, local agendas, etc.) in which it is possible for organizations and citizens to directly participate in decisions that were traditionally in the hands of political representatives. From this perspective, the focus is on the idea of governance as a process of interaction between civil society and public institutions.

- **Self-management:** Here, the proposals are built out of power and political institutions, rejecting the role of stable and bureaucratic structures of the state.

A HISTORICAL PERSPECTIVE OF PARTICIPATORY PRACTICES

With this myriad of discourses, visions and concerns about the idea of participation, next we propose to adopt a historical perspective to clarify the various meanings that the term has played in the history of development. Inspired by the work of Hickey & Mohan (2004), Cornwall (2006), McGee (2010) and Frediani et al. (forthcoming), we present in the following sections a chronology that takes as its starting point the period of decolonization in Africa and tries to contextualize the role of participation key moments in the history of development until the first decade of the 21st century. With this, we will see that the evolution of the concept does not respond as much to an internal logic to revise meanings as to structural constraints that in each precise historical moment modulate and shape development thinking.

Through an analysis of the continuities and breaks that occur in the history of participation, we will see how the concept has been useful to initiatives opposed to its original or fundamental character. Participatory processes have been lauded for their transformative potential, while simultaneously criticized for having become a means to replicate and consolidate patterns of domination. This leads us to understand participation as a dynamic space in dispute where power relations determine the forms it takes in both meaning and practice.

Participation and Integration: The end of the colonial period

In the first decades of the 20th century, participation was already on the agenda of the colonial powers. Focusing on the British colonial administration, Andrea Cornwall (2006) shows how the notion of development in those years took shape as a means of legitimizing colonial intervention. Thus, the idea of "popular participation" appears embedded in the discourses that shape the notion of development in colonized territories.

The way it is articulated in the British colonies is through indirect rule consisting of the delegation of functions and powers to traditional leaders and institutions under the

supervision of British colonial officers and subject to laws and regulations designed to promote development and moral order.

The colonial administrator Donald Cameron summed up his view of the indirect rule as follows:

“..... trying (...) to graft our higher civilisation upon the soundly rooted native stock, stock that had its foundations in the hearts and minds and thoughts of the people and therefore on which we can build more easily, moulding it and establishing it into lines consonant with modern ideas and higher standards . . . Under this system the native authorities become not only part of the machinery of Government but also a living part of it.” (Cameron, 1934 cited in Cornwall, 2006)

This idea of participation in government is mainly focused on the integration of local powers in the colonial regime as a way to ensure their hold and durability. The result is an amplification of inequalities by putting the power in local oligarchies and the marginalization of the growing number of young educated Africans who demanded political changes.

The nationalists of the time did not see this system of participation as anything more than a device of imperialism to consolidate their power, insofar as it was used to interweave the colonial administration within the network of local institutions, limiting the possibilities for social and political transformation.

Their version of participation, as shown by Hickey & Mohan (2004), was functional to a development thinking focused on the (re)production of rural communities to counter urbanization processes and socio-political change.

Participation as containment: Modernization

With the end of World War II the development era started in earnest in an international context marked by the Cold War and the independence movements within European colonies. During the 1950s and 1960s modernization became the philosophy which dominated thinking on development. It focused on ideas like industrialization, economic development and technology transfer. Participation was largely ignored by the major theories of development of this time.

Therefore, at the beginning of formal international cooperation, participation was considered a marginal theory. Development at that time consisted of an agency conceived, designed, financed, implemented and evaluated projects; and beneficiaries were seen as non-differentiated recipients of goods and services provided for charitable motives (McGee, 2010).

The only exception to this was the idea of 'community development' that set up articulated spaces of participation for people to improve their living standards with the provision of technical services to stimulate their initiative; self-help and mutual help (UN Economic and Social Council, 1956 cited in Cornwall, 2006). Here, participation is associated with rural activities of "animation" in which agencies, through missionaries and colonial officials try to generate awareness and commitment for initiatives among beneficiaries, as if one could not trust that beneficiaries would participate in an initiative that they had a hand in producing. Participation therefore takes on a paternalistic character.

However, this participation is not a politically neutral strategy; it plays an important role as a means of containing dissent. According to Cornwall (2006), community development programs in Kenya in the 1950s included educational activities for anti-colonial activist women and promoted self-help groups to teach them needed to be exemplary mothers and wives rather than political agitators. Other studies in India show how community development and self-help groups promoted various forms of busy work that dissipated dissent by distancing people from political activity (Batliwala & Dhanraj, 2004 cited in Cornwall, 2006).

Thus, participation in community development at the time could be conceived as a means of expanding the hegemony of the new state and (re)producing stable rural communities with the ideals of citizenship and responsibility associated with the stability and preservation of the post-colonial status quo (Hickey & Mohan, 2004).

Participation as Emancipation: Popular Movements

In the 1960s and 1970s, a radical shift occurred in the understanding of participation thanks to the prevalence of popular political movements of the time. It was at this time that the entire concept of development was being questioned by dependency theorists, the 'Third World' and non-aligned countries became relevant in international geopolitics, revolutionary movements spread across the world and feminism became a force in international cooperation projects.

It was in this context that figures such as Paulo Freire (1970) produced key breaks in education theory by proposing the idea of development as a process of emancipation of the oppressed against the elite through a transforming and liberating education leading to collective action. Beyond the indices of economic development or industrialization processes, development becomes understood as the struggle of people to build a more fully humane world where they become aware of themselves and overcome the cultures of silence that oppress them.

Thus, participation in this era was associated with the idea of consciousness as a process by which people, through self-inquiry and collective reflection, can think critically about the structures of oppression around them and transform their collective action to create a new society. Given that these structures of oppression are rooted in the oppressed people's own beliefs, it is through participation that people become active subjects of knowledge and action, and begin to build their own human history engaging in processes of authentic development (Goulet, 1989).

This transformative process that leads to empowerment and emancipation is articulated through various methods among which is the Participatory Action Research method developed by Orlando Fals-Borda. This is aimed at developing self-consciousness in the poor and oppressed for the progressive transformation of their environment. It enables the emergence of a counter power that allows them to move toward shared goals of social change in a participatory political system.

We see, therefore, how participation is linked to a leftist and internationalist political project and is not politically neutral when faced with conflict or strife. Thus, in addition to his work in Brazil, Freire travelled to Tanzania to support the socialist government in the development of its educational program, served as a consultant to the revolutionary government of Guinea Bissau and provided similar services to the Sandinista government of Nicaragua. Similarly, popular education played a crucial role in revolutionary processes such as those of Guatemala or El Salvador and in popular resistance to the Latin American dictatorships (Leal, 2007).

The main objective of this paradigm of participation was not development, basic needs or reducing poverty, but the transformation of the cultural, political and economic structures that reproduce poverty and marginalization (Leal, 2007). It is a process of analysis, awareness and confrontation of the "structures of oppression" embedded in forms of economic development, political government and social differentiation (Hickey & Mohan, 2004). Participation is understood as a right of citizenship and a means to challenge the subordination and marginalization.

Participation as efficiency: The rise of participation

In the 1980s, economic neoliberal policies became the hegemonic framework of development thinking through policies from individuals such as Margaret Thatcher or Ronald Reagan. With the debt crisis peaking at this time, development became associated with market liberalization, structural adjustment plans and a general reduction and roll-back of the state. In parallel, the decade witnessed the exponential growth of non-governmental development organisations (NGDOs) as providers of services that, for the most part, the state could not offer anymore.

At this time, there were a number of factors fueling the debate about participation in development (McGee, 2010). Firstly, thirty years of development "from above" did not appear to have had much effect on poverty levels around the world, an outcome partially attributed to the alienation of the "beneficiaries" within projects. Secondly, there was a growing disillusionment with international development projects, much maligned then for their paternalistic character. Thirdly, cuts in social spending in southern countries created a pressing lack of resources that made self-sufficiency and do-it-yourself an imperative.

Because of this, a significant number of development NGOs distanced themselves from assistentialism and introduced innovative approaches to work, based on self-sufficiency and empowerment through the creation of partnerships and the involvement of the beneficiaries in their actions. Ultimately, the worries around efficiency and appropriation of projects served to make beneficiaries' participation in project development and implementation compatible with the dominant neoliberal paradigm of the time (McGee, 2010). Thus, participatory method use in projects was taken up on a large scale by many donor agencies, including the World Bank.

The approach echoed the need to inform development projects by incorporating the vision of the beneficiaries, but its motivation was centered on increasing the effectiveness and efficiency of development programs (Cernea, 1985 cited in McGee, 2010). The technical and methodological development was aimed **at getting them to participate in our project** (McGee, 2010) through the development of multiple participatory tools to engage the beneficiaries, directly or indirectly, in projects already identified or to verify the sustainability of a given intervention.

One of the areas where this approach was crystallized was in programs based on principles of self-reliance. A UNICEF report from the 1980s clearly explained these processes in relation to the adjustment programs taking in parallel.

“Community participation is an essential ingredient of adjustment with a human face. On the one hand, it can help generate the political support needed to overcome short-term political and bureaucratic opposition. On the other, it is essential for the planning, implementing, and success of the approaches devised, as well as for keeping the cost of the programmes down by means of community contributions.” (Cornia et al., 1987: 295 cited in Cornwall, 2006).

Cost sharing and co-production of services with the community emerged as dominant modes, with little attention paid to development of capacity or political empowerment. The reduced role of the state, the increasing role of development NGOs as service providers and the concept of empowerment understood as the access of the poor to markets are key to

this vision of participation in development. Participation was structured development projects driven from above but informed from below, but was never framed as participation in political structures and institutions.

We are, therefore, faced with an apolitical view of participation that omits structural conflicts' background. Diverse are the voices who understand this form of participation as a strategy to legitimize the neoliberal reforms of the period. Since that the challenge of popular movements was too serious to be ignored, development embraced the idea of participation as a way to neutralize resistance from the grassroots movements to liberal reforms promising of relief (Leal & Opp, 1998 to 1999) under the premise that "incorporation, rather than exclusion, is the best form of control" (White, 1996, p.6).

Participation and self-reflection: The critical counterpoint

In this framework of participation in development, the critical counterpoint was provided by an approach developed around the writing of the sociologist Robert Chambers. Through his work, he exposes the arrogance behind the oft-made erroneous assumption within international development projects that "the external people know more." In contrast, he proposes to consider the population as active subjects rather than beneficiaries, with valuable knowledge and experience in the planning and solving of their own problems. For this, it is necessary to limit the role of the "experts" and to invite development professionals to "unlearn" their attitudes in order to put "the last ones first", valuing and recognizing the role of indigenous knowledge.

It is a deeply reflective and self-critical approach in which the professionals of development must constantly consider the power relationships established with the local population. This approach relies on both planning and evaluation 'from below' based on participatory research that eventually leads to action. If generalized approaches focus on how to get people engaged in projects, this idea is to **get us to participate in their projects** (McGee, 2010).

All this theory is accompanied by a lengthy methodological development known as Participatory Rural Appraisal (PRA), which represents an important contribution to the expansion of participatory approaches and methods. The objective of the PRA is to allow local people to make a diagnosis of their reality, predicaments and living conditions. Subsequently, participants use the information to self-manage the design, implementation and monitoring of possible improvement actions. The ultimate goal is the empowerment of the participants and their conversion into managers of their own development.

"The essence of PRA is change and reversals - of role, behavior, relationship and learning. Outsiders do not dominate and lecture; they facilitate, sit down, listen and

learn. Outsiders do not transfer technology; they share methods which local people can use for their own appraisal, analysis, planning, action, monitoring and evaluation. Outsiders do not impose their reality; they encourage and enable local people to express their own." (Chambers, 1997: 103).

The key element of this approach is the transformation of power relations between development professionals and local participants. It starts from a critique of the projects and 'top-down' planning to develop a number of methodological and attitudinal strategies that allow for capturing local knowledge in order to generate empowerment, sustainability and effectiveness in interventions. Nevertheless, the place of participation is still the development project rather than the political structures and institutions.

PARTICIPATION AS TRANSFORMATION: PARTICIPATORY GOVERNANCE AND CITIZENSHIP

With the advent of the new century we witnessed an in-depth revision of the concept of participation that was subjected to harsh criticism and became understood in a framework that is substantially different from its former self.

A harsh critique of participation in development

Based on an analysis of what had been considered participation in previous years, a number of critical voices appeared who argue that the rise of participation and its engagement in the existing planning and management frameworks has been emptied of its political content, leaving, in best case scenarios, its merely methodological dimension (Leal & Opp, 1998/99). This new analysis brought to light how the political dimension participation once had had been translated into a technical issue that had contributed to the depoliticization of development.

According to Mohan (2001), the main danger of participation understood as a method of seeking consensus is that it can further empower those who are already powerful. As Mosse (2001) argues, participatory methods generate a type of knowledge that is a reflection of local power relations¹. As stated by Kothari (2001), knowledge is understood here as a string of social norms, rituals and practices that, far from being built outside the power relations among the actors, are integrated with them. In line with this, Cleaver (2001) criticizes the limitations of participatory approaches to understand and address the social structures and institutions in which the processes unfold, and Cooke (2001) uses on social psychology and theories of groups to debunk the alleged benefits of participation in terms of effective decision-making. Additionally, he specifies mechanisms through which participation

¹ In terms of authority and gender hierarchies

can be a tool for controlling and maintaining the status quo by producing consensus among actors with strong power imbalances.

Thus, the crucial point of the debate between power and participation is the extent to which participants reproduce power relations and knowledge in the context of unequal social structures; and how participatory processes can help transform these power relations. The discourse on participation is greatly enriched here by feminist and gender studies in development in the sense of “awakening [the actors] to the issues of power, conflict and process” (Guijt and Shah, 1998 cited in McGee, 2010)

A NEW FRAMEWORK FOR PARTICIPATION

During the first decade of the new century, parallel to the above criticisms, we witnessed major changes that affect the context in which participation is placed in development. The processes of economic and cultural globalization were consolidated and accompanied by the emergence of a civil society that was organized globally. On the other hand, hegemonic development tried to take back the role of the state in development practice. Thus arises the debate on democratization and good governance in an attempt to redefine the role of the state and its relations with the market and civil society.

Governance studies focuses, in a very particular way, on how governments and social organizations interact, how they relate to citizens, and how decisions are made to address the problems and opportunities in the world. Governance is the process through which societies make important decisions, determine whom they involve and how they are accountable. It refers to the strategic aspects of government: key options and roles of the different actors. Governance is not only the process of deciding where to go, but about who should be involved in decisions and on what terms (Graham, Amos, & Plumptre, 2003).

Under the discourse of democratic governance, a reorientation of participatory processes is outlined, so that these change their focus and expand their scale from traditional participation in projects at micro level to a sector-wide participation in the elaboration, implementation and monitoring of public policies. The process develops further from a strategy promoted by development NGOs to one facilitated by governments and required by international financial institution. What then appears is a great diversity of experiments in participatory governance (McGee, 2010).

This concern for the deepening of democracy is echoed by the critics of participation in terms of the influence of power relations in the areas of governance. From certain critical views, it is stated that democracy cannot be reduced to a set of rules, procedures and institutions that guarantee civil and political rights, but must be understood as a process through which individuals exercise control over decisions that affect their lives and as such,

is a process always under construction. Democratic citizenship is achieved through the exercise of civil and political rights but also through social rights, and must be conquered through processes of participation (Gaventa, 2006).

Thus, understanding participation in the framework of the concept of citizenship brings it into broader socio-political practices through which people increase their rights as members of a particular political community, increasing their control over socioeconomic resources. The central issue for participatory interventions is then transformed in how to enhance the competence of participants to exercise their capacity for political influence in broader political and institutional settings. (Mohan and Hickey, 2004).

CONCLUSIONS

Throughout this text we have tried to reflect critically on the role of participation in development through a historical review of the meanings that it has adopted.

For a long time it has been assumed that listening to local voices encouraged more effective, efficient and appropriate development interventions while people were empowered to guide and sustain their own development through active participation. However, this assertion has not always been coherent with the conceptions and practices of participation in development.

In our historical review of the concept, we have seen how participation is a complex and controversial element whose contribution to the development process should be analyzed with caution because of the many implications that may arise from it. Furthermore, the different actors of development cooperation have shown a great ability to shape its meaning and make it functional to projects of opposing character.

In this way, the transformative potential that participation has played in certain processes of social change has often been "domesticated" to make it a more legitimizing element. To counteract this and reveal the contradictions implicit in this approach, the critical approaches propose to link the concept of participation with the notion of power, to make it explicit that participation does not necessarily imply empowerment but on the contrary, participation can also be a mechanism of social control. Therefore, it is imperative to understand the many subtle ways in which power operates in the spaces of participation in order to address the structural aspects of social change and recover the transformative potential of participatory processes.

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FURTHER/SUGGESTED MATERIALS

- Power cube site. Theoretical and practical materials on power. Tools and guidelines <http://www.powercube.net/>
- International Institute for Environment and Development – Instruments for the incorporation of power in planning and development management. <http://www.policy-powertools.org/>
- Participatory planning. Resources in planning, participatory monitoring and evaluation of development interventions. <http://www.planificacionparticipativa.upv.es/wordpress/>
- Red CIMAS. International Observatory on Citizenship and Sustainable Environment <http://www.redcimas.org/>
- The community planning website. Support of participatory planning of communities and neighborhoods. <http://www.communityplanning.net/>



PHOTO: Practical Action

CHAPTER

5

Gender perspective and interculturality

A.2

Key elements for addressing the global dimension of engineering

5

CHAPTER 5. Gender perspective and interculturality

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5 GENDER PERSPECTIVE AND INTERCULTURALITY

Clara Murguialday, HEGOA Institute

EXECUTIVE SUMMARY

Since the 1960s, development cooperation projects have made a number of reforms and changes in general policies and frameworks to promote the inclusion of women. These reforms, determined by conceptions of the social role of women, the various development models implemented and their effects on recipient countries of cooperation, have continued to evolve. This evolution is reflected in the growth in the number projects specifically targeting women and in the degree of institutionalization and normalization that women's issues have achieved in the wider development agenda.

LEARNING OUTCOMES

After you actively engage in the learning experiences in this module, you should be able to:

- Understand gender as a socially constructed category.
- To become aware of the implications of this.
- Understand the conceptual foundations and implications of interculturality.

KEY CONCEPTS

These concepts will help you better understand the content in this session:

- Gender
- Gender in Development (GAD) and other approaches
- Interculturality

GUIDING QUESTIONS

Develop your answers to the following guiding questions while completing the readings and working through the session.

- How does gender operate at a personal, interpersonal, organizational and professional level?
- What are the gendered implications within sustainable human development practice?
- Which approaches and frameworks can help us understand the relationship between gender, development and technology?

INTRODUCTION

Women-oriented policies in international development have moved on from the initial invisibility of gender needs and interests, to the present consideration of gender subordination as an obstacle to development.

As was pointed out by Caroline Moser (1991), gender-aware development approaches have tended to conceptualize women in one of 3 ways:

1. Women as a vulnerable social sector, passive recipients of development actions and intermediaries for their offspring to access certain goods and services
2. Women as economic agents, susceptible to being used to alleviate poverty in their homes and provide for their families and communities the collective services that the state does not provide, down to the conception of
3. Women as subordinate poles in the unequal gender relations, which prevents them from having access in the same conditions as men to resources and power.

These different conceptions have led to different policies, programs and projects for women in Southern societies. Although policies have appeared more or less simultaneously and not all have the same popularity in the circles of development cooperation and humanitarian aid, one can draw a chronological framework of the validity of these policies within the institutions of development over the last forty years.

WOMEN ARE INVISIBLE IN DEVELOPMENT

During the early years of international cooperation projects, the institutions responsible for promoting development simply did not “see” women. It was thought that modernization would benefit men and women equally and, therefore, the particular needs of women were subsumed in a development paradigm obsessed with economic growth.

This was explained by a premise that has all too often guided development planning: what is good for men is equally beneficial for their whole family. Given the dominant position of men in their families and communities, there was a tendency to believe that they were the appropriate representatives of the interests and needs of those who make up their household and are the suppliers responsible for working and producing what is necessary to ensure the family welfare.

Supported by these assumptions resulting policies included agricultural modernization and intensive industrialization programs which did not take into account the particular conditions of life and work of women, nor their subordinate position to men in the home and community. For a long time women were found to be "invisible" in international development.

The Welfare approach (familiar)

The first explicit appearance of women as recipients of development projects came associated with the recognition of their reproductive roles and responsibilities and, in particular, the consideration of low-income mothers as a "vulnerable sector". When planners "saw" women, the first need they recognized was related to the care of their offspring. This perspective is the base of the "welfare approach" that characterized cooperation policies implemented during the First Development Decade sponsored by the United Nations (1960s), within a development framework that prioritized the rapid growth of the national economy.

The origins of this approach date back to post-World War II when the welfare programs targeting vulnerable groups (women, children, sick or disabled people) were widely distributed in Europe, accompanied by financial aid aimed at economic reconstruction. According to the welfare approach implemented at this time, women were only worthy of welfare assistance (food, nutrition education, health care) in order to ensure the survival of the family. The mother-child binomial was identified as the unit to benefit from cooperation, and the explicit goal of the aid was to teach mothers how to raise future healthy and productive workers.

The first concern of welfare programs is the physical survival of the family. This manifests itself as the direct provision of food to infants and pregnant and nursing women, as well as offering nutrition education for mothers. Along the same lines, the maternal-infant health programs widely developed in all southern countries focused their attention on the mother-child unit and assumed that women were the only ones interested in acquiring the resources and skills necessary to ensure effective upbringing.

From the mid-1960s, the welfare approach was expanded to include population control through family planning programs. The issue of population was high on the agenda of international organizations, and development agencies were quick to identify women as responsible for limiting the size of their families and came to argue that poverty could be reduced by reducing fertility through the wide dissemination of contraceptive information and technology among women.

Although by their assistive nature, the welfare programs tended to create dependency rather than promote the empowerment of women, they are still popular among both some institutions of international cooperation as well as governments of the South. This explains why currently, similar programs are extended throughout the most impoverished countries and implemented increasingly in those countries which are going through critical situations.

Women In Development (WID) strategy

The second way to "look" at women recognized above all their productive roles societally and economically, and became common in development planning in the early 1970s. The failure of the developmental theory implemented prior to the 1970s (e.g. modernization theory) mean that it was necessary to design new interventions to combat poverty and incorporate redistributive elements in to new development policy. The proposal for the Second Development Decade (the 1970s) under the auspices of the UN would be summarized in the phrase "economic growth with redistribution".

The studies of Ester Boserup published in 1970 have demonstrated just how severe the phenomena of women's exclusion from development projects was at the time, and discussed the negative impact this had on women's living and working conditions. Women had lost status in relation to men because agricultural modernization had widened the gender gap in terms of labor productivity and income. Other studies also showed that no reference was made to the economic contribution of women in national statistics nor in the planning and implementation of development projects, despite often being the main individuals responsible for the basic economics of their communities.

This was counterbalanced by the work of a network of professional women in development agencies, who were committed to influencing development institutions so that they recognized the need to integrate women into development efforts. Grouped together as "WID Group" (Women in Development), the first outcome of their actions was the 1973 adoption of the Percy Amendment to the Foreign Assistance Act in the United States, which obliged the United States Agency for International Development (USAID) to consider women's issues in all their cooperation plans.

The second outcome was the recognition by the World Food Conference (1973) of the need for greater participation of women in the decision-making process about food and nutrition. A third came in 1974 when the World Population Conference stressed the importance of women to determine population trends.

In summary, the WID proposal aims to include women in the mainstream of development to improve their status, achieve sexual equality, and streamline development by incorporating the work of the forgotten half of the population. It presents women as productive subjects, active contributors to economic development and therefore, deserving of better opportunities and productive resources and advocates for legal, cultural and institutional changes that facilitate the integration of women into decision making processes.

The equity approach and equal opportunities

The mid 1970s showed the first signs that cooperation policies towards women were changing their focus, moving from the goals of family well-being to equal opportunities between women and men. This new trend culminated in the so-called "equity-based approach", which represents the first practical formulation of the WID strategy.

This approach is based on the recognition that women are actively involved in the development of their societies through their reproductive and productive work; however, their financial contributions to the fields of subsistence and the informal economy are usually underestimated, if not outright ignored. The promotion of equal opportunities between women and men seeks to overcome the obstacles women face in order to get a paid job and reduce the gap in wages and improve working conditions. This included the development of education and job training programs enabling women to increase their employment opportunities, political representation and action, and hopefully to give them a position equal to that of men in society.

The main concern of this approach has to do with the inequality between men and women in the public and private spheres, an issue that reflected more the concerns of Northern feminists than the demands of the women from the South, who aspired to a new international order capable of achieving a redistributive development to improve their living conditions.

Programs based on an equity approach clashed with theoretical questions, mainly because of the excessive faith placed in the market and the lack of attention to the unequal distribution of power within the family (inequality that is not automatically settled by the fact that women earn an income or that their work is more productive). It also suffered from a lack of political acceptance, since it assumed that because men had benefited more than women from the development, the egalitarian measures could contain redistributive elements that challenged male power in various areas, including the field of cooperation institutions.

Many development agencies were also hostile to this approach because programs that seek to increase the productivity of women usually require some sort of restructuring of the cultural fabric of society, and the agencies prefer not to deal with unknown social variables. Similarly, in many countries of the South the governments felt antipathy to these policies since they labeled them as feminist and considered that the exported Western feminism was irrelevant to women of the Third World.

In a climate of great antagonism towards many of its assumptions, the equity-based approach was soon shelved by most international cooperation agencies, although its endorsement by the Conference of Women in 1975 assured that it was used to improve women's status in the legislation of many countries. Because of this, one of the main

contributions of this approach is to have made the equality of women legal, including the right to divorce, custody of children, property, credit, vote, etc.

The anti-poverty approach

In the early 1970s it was widely recognized that the theory of modernization in development work had failed. The alleged benefits of development were not "trickling down" to where they were most needed, but had led to large pockets of urban and rural marginality. In this context, two approaches emerged to address the growing poverty in the Southern countries. The first urged governments to create and expand employment steadily to raise the actual income of the working sectors. The second approach was known as the one of "basic needs" and was defined by the ILO in 1976 as "the effort to meet the minimum standard of living that a society should aim to achieve for the poorest groups."

In their eagerness to avoid the resistance that the equity programs had garnered, WID professionals changed the emphasis of their arguments and posed that "providing poor women with productive resources would contribute economic efficiency to programs that fight poverty."

Thus, the "anti-poverty approach" was developed, the second practical application of the WID strategy. Its proposal centers on the productive role of women, assuming that the alleviation of poverty and the promotion of a balanced economic growth require greater productivity of women. It therefore seeks to increase employment options and generate income for women in impoverished households through a better access to productive resources.

Cooperation institutions materialized this approach in the promotion of "micro projects" that generate income, which usually were implemented in or near women's houses, and consisted of economic activities of questionable economic viability, chosen more for their compatibility with women's domestic-reproductive roles rather than anything else. Most of these projects did little to lift poor women from economic marginalization and eventually rolled into aid programs, instead of providing alternative employment and sustainable income for women.

Although the efficacy of implementation of this approach leaves much to be desired, it still enjoys wide acceptance among development agencies. It attempts to incorporate women into development but leaves household power relations unquestioned, making this approach attractive for development agencies that are fearful of confronting the unequal relations between women and men.

The efficiency approach

The late 1970s saw a marked deterioration in the world economy, especially in Latin America and Africa. To address the impact of the economic crisis, a growing number of governments were forced to implement policies of stabilization and adjustment designed by the International Monetary Fund (IMF) and the World Bank (WB) aimed at restoring the equilibrium of balance of payments, increasing exports and promoting the growth of national economies.

With the emphasis on increasing productivity and efficiency in the allocation of resources, the "efficiency approach" arose in development policy and became a third version of the WID strategy to incorporate women into development. Its analysis focuses on the economic inefficiency of wasting half of the human resources of a society (the women) and the recognition that, in times of economic crisis and structural adjustment, women are essential to the success of global efforts of development.

Moser (1991) stated that the alleged efficiency associated with the use of women's work is accomplished through the mechanism of shifting costs from the paid economy (social production) - to unpaid (reproduction) through the extension of women's unpaid working hours in their activities related to their reproductive role and community management. So, in a variety of development interventions that provide targeted food subsidies for the most vulnerable sectors (programs of soup kitchens and milk banks, for example), it was assumed that women in slums, as mothers and community managers, will be responsible for the efficient and free distribution of these services.

The policies derived from this approach aim to achieve an efficient allocation of development resources, either through the use of unpaid women's work or channeling towards them investments in human capital (education, health, credits or technical training) to achieve the high "social returns" of investing in women to achieve other economic and social objectives. Gender policies of the World Bank explained below illustrate this latest variant of the efficiency approach.

The World Bank: investing in "Female Human Capital"

Created in 1944 to finance the reconstruction and economic development of Europe after World War II, the World Bank (WB) is an international financial institution that lends money to governments. During the 1970s, the eradication of poverty around the world gained growing recognition as a desirable goal for the WB, and women benefited from some WB projects as "poor mothers". The WB's work concerning women in development began in 1977 with the creation of a "WID Adviser" to work in the body of project consultants employed by the Bank. Early on, the Bank opted for the strategy to integrate women's issues in all development

projects, rather than promoting specific projects in women's sectors. But in the next decade, neoliberal policies became the dominant economic model in the world. Since then, the WB's loans became subject to the implementation of Structural Adjustment Programs (SAPs) that were later proven to have impoverished millions of people worldwide.

When, in the early 90s, the Bank reviewed the impact of SAPs, the WID team set out to prove that attention to women's issues contributed to development objectives. Assuming that development projects would be more efficient if they took into account the productive and reproductive work of women, the WB decided to pay more attention to the female workforce. Insisting on highlighting the synergies between gender equality and economic efficiency, the emphasis was put on building "female human capital" investing in women's education and health, and equipping them through credit and technical training

Although there have been obvious gains from investing in the physical and human capital of rural women, women's organizations and women researchers are not convinced of the merit of these arguments, claiming that they lead to limiting interventions to only the cases where economic outcomes are evident. They also raise the question of what happens with the goal of gender equity when it does not obviously or explicitly favor the economic success of a project. In the planning process, the impact of diverse social relations that constrain the choices and opportunities for women has repeatedly been ignored.

GENDER AND DEVELOPMENT STRATEGY (GAD)

Since the early 1990s and as a result of feminist efforts in the South and North to include the discussion of gender inequality in the development agenda, a new way of understanding the participation of women in development processes has emerged. This new way of emphasizes the critical relations / gender subordination and the need for women to become empowered. Called "Gender and Development" (GAD), this strategy currently guides the policies of a large number of international institutions, governmental and non-governmental in development cooperation.

From "women" to "gender relations" as a development issue

The term "gender" is used by feminists to emphasize that differences and inequalities between men and women are socially constructed, rather than biologically determined. In the field of development cooperation, professionals and activists who were critical of the classification of women as "the problem" or in analyzing their situation separately, found in the gender category a useful tool for understanding the particular integration of women in development processes: it shifted the emphasis of the analysis and proposals from being centered on women and to being focused on gender, and particularly on the unequal power relations between genders.

A key assumption of the GAD strategy is that 'nothing is neutral in terms of gender'. As stated by Cathrine Hasse (cited in Macdonald, 1994)

"...all projects, including those of a technical nature, have a gender dimension because they are always designed for men, women or both. This implies that, regardless of whether it is a project with women or with men, it will always impact on the other gender. All women's projects affect the position of men, and vice versa; hence, no project can claim gender neutrality. "

Therefore, the GAD strategy aims to analyze social processes and institutions that lead to inequalities between men and women, the asymmetric assessment of capacity and behavior of both genders, and the different access to resources and power that are thus generated. In addition, GAD is also a political proposal in that it requires a commitment to building equitable gender relations, questioning the concept and practice of development often understood as a sustained process of economic growth that can lead the "underdeveloped" societies towards the current model of society in the developed North.

GAD claims, however, an alternative development that has as its ultimate goal a society structured on a democratic basis, participatory and egalitarian, in which women are seen as active agents of change that have to be heard both in the design of strategies and development policies as in planning, management and evaluation of projects, and must participate in the spaces where decisions affecting them are made.

During the current decade, the terminology of gender (gender roles, gender relations, gender analysis, etc.) has been widely adopted by international agencies, governmental and non-governmental institutions, etc., although it is not being interpreted in the same manner. An economic view of gender analysis, as that usually adopted by the World Bank, uses this as a tool to overcome the inefficient allocation of resources in development work. For women's movements, however, gender as a concept and GAD strategy refer to asymmetries of power between men and women that must be confronted by development policies, through supporting empowerment processes, and the organization and autonomy of women.

Gender equity: Human Development Goals

In the last decade, the GAD strategy has received strong institutional support from the United Nations and other multilateral development agencies. In particular, the paradigm of "human development" proposed by UNDP, to place people at the center of development concerns, establishes a more favorable framework than the previous one to raise a feminist agenda. Indeed, if it is true that in the center of development is the human being, then the care and maintenance of this human is also of value. Therefore, development should value those who

perform it and afford them the necessary resources to do so. Since this work is performed mainly by women, it follows that development agencies should develop strategies to explicitly support women.

Moving towards the equal status of women and men is not a technocratic goal but a political process that requires a new kind of thinking in which women's and men's stereotypes be replaced by a new philosophy that believes that all people, regardless of their gender, are essential agents for change. This was reflected in the Political Declaration of the Beijing Conference adopted by most governments of the world in 1995.

The concept "gender equity" is a useful category in this new discursive framework as it makes it clear that special actions oriented to removing barriers that prevent women from participating on equal terms must often be implemented. The need to take into account the existing differences and inequalities between men and women has led to the emergence of the so-called "differentiation policies for equality" or "Positive Action policies" which treat differently those who are unequal in order to reduce economic, cultural, social and political distances between social groups.

Women's empowerment

One of the proposals of the GAD strategy is to achieve gender equity in development. Its origins lie in the reflections and experiences of women's movements in the Third World during the 1980s, and has, as its core element, the enhancement of women's capacities and role. It recognizes from the recognition that policies aimed at women to date have been minimally effective in improving their economic and social power in relation to men in the context of development.

The OECD Development Assistance Committee (DAC), in its document "Equality between men and women: towards sustainable development centered on the individual" (1998) has defined woman's empowerment as "recognition that women legitimately have the ability to and should, individually and collectively, participate effectively in decision-making processes that shape their societies and their own bodies and lives."

Based on the practical needs of women but recognizing existing inequalities between genders and women's strategic interests, the empowerment approach contemplates that women experience subordination differently according to their race, class, colonial history and current position of their societies in the international economic order. This suggests, therefore, that women should challenge oppressive structures and situations at different levels and are a fundamental force for change, not only in regards to their subordination as gender but also regarding the struggles of their societies for national autonomy, democratic achievements or changes in economic structures.

Women's movements in Latin America and the Caribbean have proposed the concept of "autonomy" as a useful tool to analyze the women's empowerment process. Understood as an emancipatory strategy, the autonomy of women involves both internal processes that lead to self-determination, and collective actions aimed at transforming social relations of power.

The Gender Mainstreaming (GM) approach

This second proposal of GAD's strategy seeks to counteract the persistent political marginalization of women's opinions in the development process, especially at the level of development planning in government, multilateral and non-governmental institutions.

"Gender mainstreaming" (also called "gender integration or incorporation") has been defined as:

"The organization (or reorganization), improvement, development and evaluation of policy processes, so that an equality and gender equity perspective is incorporated in all policies, at all levels and at all stages, by the actors normally involved in the adoption of policy-making measures". (Council of Europe, 1998)

This proposal was first made at the Third World Conference on Women in Nairobi (1985). The decisions taken there established that the United Nations would put into practice a comprehensive policy on women's equality and that it be incorporated in their medium-term plans, statements, goals, programs and other relevant policy documents. In the Beijing conference, gender mainstreaming was explicitly endorsed by the Platform for Action, stating that "governments and other actors should promote an active and visible policy of mainstreaming a gender perspective in all policies and programs, so that, before decisions are taken, an analysis is made of the effects on women and men, respectively".

At the European level, gender mainstreaming was mentioned in the Third Medium-Term Community Action Program on Equal Opportunities for Women and Men (1991-95) of the European Commission and became a central issue in the Fourth Action Program. In 1996, the Commission adopted a communication on gender mainstreaming, defining it as

"Mobilising all general policies and measures specifically for the purpose of achieving equality by actively and openly taking into account at the planning stage their possible effects on the respective situation of men and women (gender perspective)". (European Commission, 1996, p.2).

To integrate, incorporate or mainstream gender perspective into institutional practices it is necessary to operate simultaneously at all three levels of the dynamic of an institution:

- The substantial level, based on institutional policies and objectives.
- The structural level, related to the procedures and mechanisms governing institutional life.
- The cultural level, on the values assumed by the institution and its members' attitudes about gender inequality.

But above all, it is imperative to produce a change in the methods of work of the institutions, in all areas and at all levels. The formulation of all policies must begin with a "gender analysis", whether they are economic programs in industry, agriculture or transport, or relate to women's traditional areas such as maternal and child health or small-scale production.

Gender mainstreaming cannot replace or repeat policies to solve particular problems of women in a society, whether they be Equal Opportunity or Affirmative Action policies, but rather must supplement them. They are two different strategies and must be work in parallel, forming a dual strategy.

While equality policies are aimed at solving problems and the needs of women, and act in specific areas and very quickly, gender mainstreaming adds to a reorganization of the process of implementation and the creation of policies so that the actors involved take the gender perspective into account. This strategy requires more time to be implemented but has a greater potential for change than previous equality policies.

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