# Chapter 4
# Towards a Model of Integrated Community-Managed Development

**L. Jan Slikkerveer**

> *One of the important effects of globalisation is decentralisation which means recognition of different backgrounds and ethnic values. It assures the reorientation of traditional values and norms, discarding the Western hierarchical concept of Transfer of Technology (TOT), replacing it with more participatory policies of a 'bottom-up' approach where participation and sustainable development form the order of how things are to be done.*
>
> Anak Agung Gde Agung (2007)

## 4.1 Multidimensional Conceptualisations of Global Poverty

One of the most prevalent and pervasive development problems on the globe today relates directly to poverty. As an unacceptable condition of humankind, it has been the subject of an advancing process of conceptualisations, definitions, analyses and levels, which have extended its meaning over the past decades from a single condition of a mere lack of finances to a multidimensional complex of socio-cultural, economic, and political factors influencing human deprivation in well-being. From a psychological perspective, poverty can be caused by two factors: those related to the individual's role and those related to the social-cultural role. Depression, alcoholism and anti-social personality disorder are some causes of poverty at the individual level, where these cases commonly occur in urban areas (cf. Murali and Oyebode 2004).

Economic disparity, income difference, social class and prejudicial stereotypes are among the causes of poverty related to the social system (cf. Turner and Lehning 2006). The anthropological view sees poverty as the result of the growing

L. J. Slikkerveer (✉)
LEAD, Leiden University, Leiden, The Netherlands
e-mail: l.j.slikkerveer@gmail.com

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imbalance between global and local systems, where the processes of international economic development and globalisation tend to exclude indigenous cultures, causing poverty and deprivation to rise among local peoples and communities, particularly in developing countries.

As mentioned in the *Introduction*, a realistic conceptualisation of poverty is not only important for a credible assessment of the actual position and numbers of the poor living on the planet, but also for the design of appropriate strategies to reduce this intolerable condition on a global scale. Poverty has also been defined in various ways in order to enable a reliable measurement and comparison of the percentage of different categories of poor people living within and among populations. Three basic approaches have emerged over the past decades in an effort to conceptualise poverty, respectively, as a material condition, as a multidimensional condition and as a relational condition of the poor, which have been influenced by a number of global trends, including globalisation, financial crises, climate change and political instability. While poverty has initially been defined in monetary terms as a human condition where people lack money to meet their basic needs, the definition has become more realistic over the past decades to encapsulate the persistent condition of a general lack of access to adequate services of health, education, justice, employment and freedom, rendering poverty to a wider, more socio-cultural complex problem in the society.

The challenge of addressing poverty from a multidisciplinary perspective grew out of diverse views and opinions from scientists of different disciplines. From a historical point of view, poverty can be understood in the public consciousness over the past centuries. Following the colonial period of time of dominance and marginalisation of the rural people in non-Western areas, mass immigration and industrialisation have contributed to both rural and urban poverty in the early 20th century, whereas in the 1930s the stock market crash and depression have further increased poverty among the population in both Western and Non-Western countries.

A wider approach to assess poverty in conjunction with well-being has been introduced by Sen (1990), arguing that well-being is directly related to the capability to function in the society, linking the concept of poverty to wider notions of social need and well-being. According to this approach, poverty arises when people lack such capabilities to obtain sufficient income, education, and health, pertaining to insecurity, low self-confidence, a sense of powerlessness, or the absence of rights, such as freedom of speech. According to this view, poverty is a multidimensional phenomenon and by consequence less amenable to simple solutions. Although in general a higher income could contribute to the alleviation of poverty, it would need to be preceded by measures to empower the poor, insure them against risks and address specific weaknesses, such as inadequate schools, or limited health services. Poverty tends to arise when people are lacking these key capabilities.

Later onwards, Anand and Sen (1997) further developed the multidimensional perspective of the concept of poverty in relation with human development, in which poverty is assessed from a human development point of view. Their wider multidimensional perspective focuses not just on poverty of income, but on poverty

within the context of development as a denial of choices and opportunities for living a tolerable life. By acknowledging that development refers to a multidisciplinary process, by consequence, the related factor of poverty similarly requires a multi-disciplinary approach. Recently, Austin et al. (2005) have further elaborated the multidimensional perspective on poverty in a framework for social services agencies to move their services towards a more extended family and neighborhood approach. The related global *Multidimensional Poverty Index* (MPI) was later proposed by Alkire and Santos (2010), and since then implemented by the UNDP's *Human Development Reports* since 2010.

A similar multidisciplinary approach to focus on poverty reduction in Indonesia through the provision of not only financial, but also medical, educational, communication and cultural services to the poor has also been initiated in the advanced training of community-based managers at Universitas Padjadjaran in Bandung with the introduction in 2012 of the new master Course on Integrated Microfinance Managers (IMM).

Among the leading international organisations working in the field of poverty reduction through a focus on *human* development is the United Nations Development Programme (UNDP). It has been implementing the above-mentioned multidimensional perspective on the concept of poverty in relation with human development, as substantiated by its annual *Human Development Reports* since 1990. In contrast, the other major international organisation involved in poverty reduction, the World Bank, supports *economic* development, as documented in its annual *World Development Reports* published since 1997.

What followed was the increased priority which poverty reduction has recently received on a global level, not only by the World Bank (2016a) in its dual approach to reach the end of chronic extreme poverty by 2030 and the promotion of shared prosperity, but also by the United Nations (2015) in its latest Post-2015 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs).

Recently, the World Bank (2017) introduced an important aspect into the debate on poverty reduction, being the need for an improved methodology to collect and compare reliable data on poverty and the related factor of inequality worldwide, providing a more solid framework for policy making. The recommendations as to how the monitoring of the progress up to 2030 should be conducted are presented under three headings: raw materials (data), analysis, and presentation.

Also, the promotion of shared prosperity has recently attracted attention since high income inequality is found to constrain economic systems and international collaboration, and as such the primary goal of ending poverty by 2030. As the Report on *Taking on Inequality* by the World Bank (2016a: 9) shows, the more equal countries appear to have healthier people and be more economically efficient than highly unequal countries. Moreover, those countries which focus their policies on reducing inequality are likely to experience more sustained economic growth than those which don't: "*Less inequality can benefit the vast majority of the world's population.*"

As mentioned before, one of the most commonly used ways to measure the incidence of poverty has been to assess the material condition of people based on

the 'dollar-a-day' criterion elaborated by the World Bank (2005a). In this way, people are presumed to live in *extreme poverty* when they earn less than $1.25 per day, while the population living in *moderate poverty* earn between $1.25 and $2.00 per day. According to this indicator, the number of people who are living under the poverty line was estimated in 2011 at about 1.4 billion (21.7%) and 2.6 billion (40.2%), observed in all parts of the world, including the developed nations, further substantiating the urgent need for the reduction of extreme poverty as a global challenge. These most recently available poverty estimates are shown in Table 4.1, which, however, are not considering the recent global food crisis and increased cost of energy, which would add about 100 million more people living below the poverty line (cf. Shah 2011). After the recalculation by the World Bank (2012) of the poverty line of $1.25 to $1.90 per day in order to introduce a new international poverty standard, however, the overall level of global poverty has remained basically unchanged.

The World Bank recently published two books on the subject of poverty, which deserve attention: *Introduction to Poverty Analysis* (2005b) and *Handbook on Poverty and Inequality* (Haughton and Khandker 2009) which elaborate on the recent widening of the concept of poverty. Embarking on the previous definition of poverty by the World Bank (2000) that: "*poverty is pronounced deprivation in well-being*", new questions have been raised of what actually is meant by 'well-being' and of what the reference point is against which to measure deprivation.

The conventional approach is to define well-being (and hence poverty) as the command over commodities in general, meaning that people are better off if they have a greater command over resources. As the main focus is on whether households or individuals have enough resources to meet their needs, poverty is then measured by comparing individuals' income or consumption with some defined threshold below which they are considered to be poor. However, a broader approach to well-being is to establish whether people are able to obtain a specific type of consumption good, such as food, shelter, health care or education, further extending the traditional monetary measures of poverty. Since additional factors should be considered, such as the inflation rate of the country, the differentiation

**Table 4.1** The World Bank's latest estimate of poverty at different poverty levels (2011)

| Poverty line (US $ per day) | Population in poverty (in billions of people) | Population above that level of poverty (in billions of people) | Percentage in poverty |
|---|---|---|---|
| 1.00 | 0.88 | 5.58 | 13.6 |
| 1.25 | 1.40 | 5.06 | 21.7 |
| 1.45 | 1.72 | 4.74 | 26.6 |
| 2.00 | 2.60 | 3.86 | 40.2 |
| 2.50 | 3.14 | 3.32 | 48.6 |
| 10.00 | 5.15 | 1.31 | 79.7 |

*Source* Shah (2011)
URL: http://www.globalissues.org/article/4/poverty-around-theworld/
World Bank's Poverty Estimates Revised

among household members, the prevailing health conditions in terms of diseases, access to education, etc. the World Bank (2016a) further extends its approach by linking *poverty* with *shared prosperity*, which also takes the disadvantages of inequality into account within the context of the widening gap between the rich and the poor. Shared prosperity is measured as the growth in the income or consumption of the bottom 40% of the population in a country.

For the World Bank, poverty is now conceptualised as a situation of pronounced deprivation in well-being, comprising several dimensions of low income and the inability to acquire the basic goods and services necessary for survival, low levels of health and education, poor access to clean water and sanitation, inadequate physical security, lack of voice, and insufficient capacity and opportunity to better one's life. As the result of its experience over the past decade, the World Bank (2016b) has added another dimension to the definition of poverty with the concept of 'inequality'. Such inequality among people has continued in opportunities, gender disparities, and deprivations in many sectors of the society, which need to be brought into balance, implying that prosperity must be shared meaningfully within developed and developing countries. In the latest publication of the World Bank (2016c), an estimated 767 million people are living under the new international poverty line of $1.90 a day, meaning that almost 11 people in 100, or 10.7%, were poor. Given the low standard of living implied by the $1.90-a-day threshold, poverty continues to remain unacceptably high around the globe.

The *United Nations Development Programme* (UNDP 1997), one of the world's leading bodies in the field of poverty reduction and international development, had introduced the *Human Poverty Index* (HPI), as a composite index which combined national estimates of deprivations in health, education and standards of living in a single number to complement the *Human Development Index* (HDI) in order to reflect the extent of deprivation. As mentioned before, the conventional measure of poverty only considers income, and people living on less than $1.25 a day are regarded as extremely poor. People, however, can also be deprived of schooling, proper nourishment, safe drinking water, etc. rendering them poor in a broader perspective. The *Multidimensional Poverty Index* (MPI) encompasses such a broader, weighted average of 10 indicators, which allows for a realistic assessment of people who can be considered in multidimensional poverty if they are deprived in at least a third of these indicators, with each indicator having a defined deprivation level. Longitudinal measurement of MPI changes in the actual situation of poverty became manifest in developing countries as a group, where human poverty affects more than a quarter of the population. Sub-Saharan Africa and South Asia are sharing the population living in extreme poverty with an income of less than $1.90 per day and human poverty at about 40% (cf. World Bank 2014).

The *Human Poverty Index* (HPI) was later supplanted by Alkire & Foster (2009) to the *Multidimensional Poverty Index* (MPI) which was introduced in the *Human Development Report* of the United Nations (2010), entitled: *The Real Wealth of Nations, Pathways to Human Development*. The MPI overcomes the overlapping deprivations at the household level by using three dimensions of human development: health, education, and living standards. These dimensions consist of ten

indicators which were weighted equally in the MPI. The ten indicators include nutrition, child mortality, years of schooling, children's school enrollment, cooking fuel, sanitation, water, electricity, floor and assets.

The United Nations basically refers the concept of poverty to the inability of people of having choices and opportunities, a violation of human dignity characterised by lack of a basic capacity to participate effectively in society and of access to services. The above-mentioned *Multidimensional Poverty Index* (MPI) responds to the complexity of the concept and identifies deprivations across the same three dimensions as the *Human Development Index* (HDI), reflecting a long and healthy life, access to knowledge and a decent standard of living. The MPI shows the number of people who are multi-dimensionally poor, i.e. suffering deprivations in 33% or more of weighted indicators and the number of deprivations with which poor households are typically confronted.

The MPI can be deconstructed by region, ethnicity and other groupings as well as by dimension, rendering it a useful tool for national and regional policymakers to pay particular attention to specific target groups in the society.

According to the United Nations *Human Development Report* (2015), around 1.5 billion people live in multidimensional poverty, estimated by using the MPI measure for 101 countries. At least about one third of the indicators reflect severe divestiture in access to health care and education, and a low standard of living. In addition, about 800 million people are potentially vulnerable to fall into poverty. The five countries with the largest populations in multidimensional poverty include Ethiopia, Nigeria, Bangladesh, Pakistan and China. However, the countries with the highest proportions of their population living in severe poverty, i.e. deprived in more than half the dimensions, are Niger, South Sudan, Chad, Ethiopia, Burkina Faso and Somalia, at more than 60%, and Guinea-Bissau and Mali, at more than half.

## 4.2 The Challenge of the New Century: Global Poverty Reduction

Since the problem of poverty has been acknowledged to pervade human life into worldwide miserable conditions, efforts to solve this predicament on a global scale have recently moved further upwards on the list of global priorities. It is clear that among the leading international organisations and agencies concerned about the worldwide problematic position of the poor, such as the World Bank and the United Nations, a general consensus has eventually been reached about the complexity and multiplicity of the conceptualisation of poverty. Similarly, these organisations agree, that the current state of global poverty is still unacceptably high, and as such in urgent need of a comprehensive and effective strategy of poverty reduction at the global level.

The absence of relevant considerations concerning poverty in the past has also created difficulties to envisage effective policies and solutions towards poverty alleviation. Scientists and practitioners agree that approaching poverty requires a broadened view, involving different categories of factors ranging from economic to social, medical, educational and cultural circumstances in which poor people are living, and by consequence, the related efforts to reduce poverty demand a similarly holistic approach.

In general, the different approaches designed to lift people permanently out of poverty include humanitarian, financial, economic and social measures. Since the concept of poverty in itself is already complicated, as indicated above, it is not surprising that likewise, the various remedies have shown to be rather problematic as well.

Humanitarian aid is largely material and logistic assistance is given to people in need, usually provided as short-term help until the long-term aid by the government and other institutions take over in the form of measures of poverty-efficient allocation of aid. The allocation of aid among countries generally reflects multiple objectives. It may be used to rebuild post-conflict societies, or to meet humanitarian emergencies. However, the core objective is most commonly poverty reduction. Humanitarian aid is closely related to the *Universal Declaration of Human Rights* (UDHR) adopted by the United Nations General Assembly on 10 December 1948 (cf. Pogge 2012). The Declaration represents the first global expression of what many people believe to be the rights to which all human beings are inherently entitled, including: "*promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language, or religion*, *and member states pledge to undertake 'joint and separate action' to protect these rights.*" (cf. UN-UDHR 1948).

Back in the 1990s, the financial policies towards poverty alleviation were initially focused on programmes of structural adjustment and financial liberalisation with a view to improving economic growth in developing countries. The results of financial sector reform, however, have been disappointing (cf. World Bank 1989; Cull 1997; Williamson and Maher 1998). The subsequent financial crisis had a severe impact on the position of the poor, and poverty levels showed an increase in most developing countries. In their study on the relationship between financial development and poverty reduction in developing countries, Jalilian and Kirkpatrick (2001) contend that, despite the limitations of their data, financial development can contribute to poverty reduction. The authors support the position of several agencies and NGOs, including the World Bank, that improved access of the poor to financial services strengthens the productive assets of the poor, and as such would reduce poverty.

However, as indicated in the *Introduction* and further elaborated in Chap. 2, following the transition by the mid-1990s from socio-economic policies of poverty reduction to a new financial strategy of *microcredit*, introduced by Mohammad Yunus and the Grameen Bank in Bangladesh, a shift took place in the late 1990s to commercial *microfinance*. However, the 'new wave' of *microfinance* led eventually to growing disillusions as the neoliberal approach in microfinance began to reveal

the failure and factual incapacity of microfinance to improve the situation of the poor and low-income families. Soon, an international debate emerged between the defenders of the *financial systems* approach and those who support the *poverty lending* approach.

While the first approach advocates the notion that the capacity of MFIs to achieve self-sustainability can only be generated from income from lending money to clients—including the new target group of the 'bankable poor'—and reducing operational costs of the institutes, the *poverty lending* approach, however, emphasises the importance of providing credit with subsidised interest rates to help overcome poverty as the poor cannot afford high interest rates (cf. Robinson 2001; Hermes and Lensink 2011; Slikkerveer 2012). As described above, an increasing number of independent studies are documenting that the microfinance approach does not really reach the poor and low-income families, and in only a few cases does it improve the situation of the middle-income groups, largely because of the commercial interests of MFIs, self-sustaining NGOs and banks, rendering microfinance being a 'poverty reduction tool' extremely doubtful.

Following the successful U.S. Programme of the Marshall Aid after World War II, aimed at helping the European countries in their efforts to reconstruct the war-torn circumstances, largely focusing on 'investment in capital' to strengthen the relations between relief, rehabilitation and development, the development aid to the new independent nations of the Third World attempted to implement a similar socio-economic development approach (cf. Myrdal 1968).[1] During the successive phases of 'development aid' and 'development cooperation' with developing countries, the community development movement expanded rapidly, but in the course of the 1970s, it declined largely because of the disappointing results of the 'top-down' 'Transfer of Technology' (TOT) process which failed to encourage self-help efforts and community participation for socio-economic development. As mentioned before, soon thereafter, a new development assistance approach of *Integrated Rural Development* (IRD) was launched, which, after its promising take-off to direct its efforts towards improving the productivity and welfare of the rural poor in the poorest countries, gradually declined as the result of its incapability to meet its objectives of increased agricultural production and human well-being. As Cohen (1987: 11) concludes: "*In the end, the strategy of integrated rural development suffered the same fate as community development: rejection.*"

[1]The Marshall Plan (officially the European Recovery Programme, ERP) was an American initiative to aid Western Europe, in which the United States gave over $12 billion (approximately $120 billion in current dollar value as of June 2016) in economic support to help rebuild Western European economies after the end of World War II. The plan was in operation for four years beginning April 8, 1948. The goals of the United States were to rebuild war-devastated regions, remove trade barriers, modernise industry, make Europe prosperous again, and prevent the spread of communism. The Marshall Plan required a lessening of interstate barriers, a dropping of many regulations, and encouragement towards an increase in productivity, labour union membership, as well as the adoption of modern business procedures.

By the end of the 20th century, experience in international economic growth, especially in the developing countries, had shown that, despite the widening gap between the rich and the poor, the process of the reduction of poverty could indeed provide a contribution to human development, which, in turn could eventually also contribute to the improvement of the position of the poor on the long term. So far, the overall consensus underscores that poverty reduction and sustainable development are inextricably linked and mutually dependent.

As Schaffer (2001) contends, new ways of thinking started to reflect through the international discourse on poverty and development, exemplified by new approaches towards poverty reduction by the World Bank and the United Nations. As described above, the concept of poverty had already been widened by the shift from the physiological model of deprivation to a social model, encompassing issues of vulnerability, inequality and human rights. In addition, the interpretation of the causes of poverty was also broadened to include a wider range of new variables related to social, political, cultural, and environmental factors. The interest in the causal context of poverty was further deepened with a focus on the fluctuations and movements of the poor in and out of poverty. Special international development-based poverty reduction programmes have been designed and implemented as concerted efforts for longer periods of time in different ways of economic liberalisation, self-determination, returning property rights to the poor—especially land and resources—providing various financial, health, education and social services to all—and the fight against corruption and political instability on an international scale in order to achieve socio-economic development.

Several international organisations and their agencies started to focus their attention on the global aspects of poverty reduction in conjunction with socio-economic development, and soon, poverty reduction became acknowledged to embody the main development problem of the new century. Wiggins and Higgins (2007) introduced a strategy of pro-poor growth and development based on the theorem of the 1990s that economic growth rates in developing countries would have to increase in order to close the gap with the developed countries. However, since poverty reduction still refers to a rather complicated and yet indeterminate process in which economic growth is one among many factors, uncertainty remains about its role. Moreover, the authors agree that no blueprints for growth and poverty reduction exist, and that each country would need detailed and specific analysis.[2]

The humanitarian approach to poverty reduction was further underscored by UNESCO, a United Nations agency which seeks to contribute to peace and security around the globe by encouraging global collaboration between countries through

[2]The idea of the 1990s, that economic growth could play a role in the reduction of poverty, has led to a renewed interest in pro-poor growth, in which two concerns dominate the discussion: rates of growth in developing countries have to increase in order to narrow the gap between the developing and the developed countries, and poverty has to be reduced on a worldwide scale. According to Wiggins and Higgins (2007), economic growth is usually necessary for poverty reduction, but it is far from sufficient, and poverty reduction through growth depends on access to markets.

education, science, and culture in order to substantiate universal respect for justice, the rule of law and human rights together with fundamental freedom, affirmed in the *Universal Declaration of Human Rights* (UDHR) of the United Nations (1948). The constitution of UNESCO declares that peace must be recognised upon the intellectual and moral solidarity of humanity. In addition, in 2005, the 33rd General Conference of UNESCO in Paris announced the *Universal Declaration on Bioethics and Human Rights* (UDBHR). The reason behind the declaration is based on the lack of bioethical guidelines, particularly in developing countries. Although the Declaration attempts to guide global ethical considerations in the field of bioethics and development, a more general concern to individuals and communities, particularly in developing countries, is well indicated. The main implication of the UDBHR for poverty reduction and development is that policy makers and government agencies should also incorporate ethical factors and humanitarian considerations in the policy planning process, which relate to human rights, both individually and socially, towards the interests of local peoples and communities.

In this respect, UNESCO's Declaration also supports the integration of the *emic view* in development, as promoted by Warren et al. (1995). The recommendation that sustainable development should be planned and executed on the basis of local people's perspective and participation later found wide support from other scientists, including Morris et al. (1999), Woodley et al. (2006) and Deubel (2008). The broader implications of the *Universal Declaration on Bioethics and Human Rights* (UDBHR 2005) encompass, on one hand, the support to the global recognition towards ethical considerations in development, while on the other hand, it also acknowledges peoples' own perspective of how development should be planned and implemented in a sustainable way.

## 4.3 World Bank and United Nations: *Economic and Human Development*

In addition to the above-mentioned advancement of ethical guidelines for sustainable development by UNESCO, two major organisations had taken up the challenge of poverty reduction for sustainable development by the end of the former century, i.e. the World Bank and the United Nations and its major agencies.

Although a consensus has been reached about the multidimensional aspects of poverty, the strategies are still different. While the World Bank continues to approach poverty reduction from an economic development perspective, the United Nations does so from a human development point of view. Such differences are also expressed in the respective annual reports: the *World Development Reports* of the World Bank and the *Human Development Reports* of the United Nations.

Since 1978, the World Bank had started to publish its annual *World Development Reports*, providing a comprehensive and timely overview on the economic dimension of development, in which each year a specific aspect of

development is highlighted as a reflection of the progress and experience in international world development. In this way, the *World Development Reports* have not only provided a view of the evolution in the way of thinking on socio-economic development, but also the progress in policy recommendations on relevant topics ranging from agriculture, the role of the state, transition economies, and labor to infrastructure, health, the environment and poverty reduction.

After the first publication of the *World Development Report* (WB 1978) on some major economic development issues confronting the developing countries, the prospects for progress in accelerating growth were already highlighted within the context of the related policy issues operational at the time. A few years later, the *World Development Report* (WB 1980) identified two major challenges facing the world at the time: to continue the social and economic progress of the past 30 years in an international climate which looked less helpful, and to tackle the plight of the 800 million people then living in absolute poverty. A few years later, the *World Development Report* (WB 1985) focused on the contribution which international capital was making to economic development, especially how the institutional and policy environment affected the volume and composition of financial flows to developing countries.

Then, the *World Development Report* (WB 1990) focused entirely on the position of the poor: a broad definition of poverty was adopted to include not only income, but also literacy, nutrition, and health. In addition, two elements have been put forward as being important to strive for sustainable progress on poverty reduction: the promotion of efficient use of the poor's most abundant asset—labour—and the provision of basic social services to the poor, e.g. primary health care, family planning, nutrition, and primary education.

Following subsequent *World Development Reports* thereafter, focusing on relevant topics for development, such as the role of the environment, the infrastructure, the labour market, and health, the *World Development Report* (WB 1998/1999) entitled *Knowledge for Development* further deepened the way of thinking about poverty reduction and economic development by acknowledging that not capital, but *knowledge* is the key to sustained economic growth and improvement in human well-being. Such important recognition did not only pay due attention to the work of many scientists working on the crucial role of the exchange and transfer of different systems of knowledge in international development, but also enabled the World Bank to acquire more appropriate tools for sustainable policy planning and implementation, particularly with regard to developing countries. The Report starts with an interesting discussion of the importance of knowledge for development, also touching on the international debate on the role of indigenous knowledge in development. Although the Report rightly draws the attention on the central issue of the enduring knowledge gap in terms of inequality between developing and developed nations which affects the poor in a disproportional way, and identifies some critical steps which developing countries should take in order to narrow the knowledge gaps, such as the acquisition of knowledge through research and development and building on indigenous knowledge, the potential and functionality

of indigenous knowledge for poverty reduction are not fully reflected in the conclusions of the Report.

The *World Development Report* (WB 1999/2000), entitled *Entering the 21st Century,* signalled the new challenges posed by the transforming economic, political and social development landscape at the turn of the century. Two forces of change are dealt with: the integration of the world economy and the increasing demand for self-government, which both affect responses to key issues including poverty reduction. The *World Development Report* (WB 2000/2001), entitled *Attacking Poverty,* has further set the tone for the high priority of the poverty reduction approach for the new decade, focusing on the various dimensions of poverty, and on strategies of how to create a better world free of poverty. Furthermore, the international dimensions are indicated including global actions to fight poverty, analysing global trade, capital flows, and how to reform development assistance in order to improve the livelihood of poor people.

The *World Development Report* (WB 2004), entitled *Making Services Work for Poor People,* provides a practical framework for making basic services such as water, sanitation, health, education, and electricity available for poor people. The framework provides governments and donors with useful tools to reach the common objective of poverty reduction.

The most recent *World Development Report* (WB 2016a), entitled *Digital Dividends*, shows that the current digital revolution offers new opportunities for the promotion of development through three mechanisms of the internet: inclusion, efficiency and innovation. The poor in particular can benefit from digital technologies in their access to markets and services. On a wider scale, digital technologies are instrumental in the accumulation and storage of different knowledge systems for development, not least indigenous knowledge systems.

In the meantime, the United Nations became intensely involved in the global strategies of poverty reduction, which was expressed in the successive *Human Development Reports* annually published since 1990 by the *United Nations Development Programme* (UNDP). In highlighting its constructive contribution to the international development debate, UNEP became a pioneer in highlighting the human dimension of development in the international debate on human development and related issues, including poverty reduction, over the past few decades. Starting with the first *Human Development Report* (UNDP 1990), entitled Concept and Measurement of Human Development, the attention was drawn on people, and how development extends their choices, which goes further than the economic growth of the Gross National Product (GNP), income and wealth. Embarking on this perspective, human development was measured by a more comprehensive index as mentioned above—known as the human development index—reflecting life expectancy, literacy and command over the resources to enjoy a decent standard of living.

The Human Development Report (UNDP 1991), entitled 'Global Dimensions of Human Development', analysed the global markets in relation to their ability to meet, or fail to meet, the needs of the world's poorest people. The following *Human Development Report* (UNDP 1993), entitled *People's Participation*, underscored

the importance of peoples' participation in the events and processes which shape their lives. If participation is operationalised in an appropriate national and global framework, it could become a significant source of vitality and innovation for the creation of new and more just societies.

Special attention for global poverty eradication transpired through the *Human Development Report* (UNDP 1997), entitled *Human Development to Eradicate Poverty*, which embarks on the notion that the world does have the resources and the know-how to create a poverty-free world in less than a generation. In the *Human Development Report* (UNDP 1997), entitled *Human Development to Eradicate Poverty,* the strategy to eradicate poverty is made rather explicit to involve a number of activities, including: (a) removing barriers which deny choices and opportunities for living a tolerable life; (b) safeguarding people from the new global pressures which create or threaten further increases in poverty; (c) building assets for the poor; (d) empowering men and women to ensure their participation in decisions which affect their lives; (e) investing in human development such as health and education; and (f) affirming that the eradication of absolute poverty in the first decades of the 21st century is not only feasible and affordable, but also morally imperative.

As regards the position of indigenous people, the Report underscores that in many parts of the world disparities in income and human poverty affect the indigenous people disproportionately, as they are in general poorer than most other groups of the society. Important evidence is provided of the generally deplorable position of the indigenous peoples, where in developing countries the poorest regions are those in which most indigenous peoples are living. As the *Human Development Report* (UNDP 1997) also documents: "*In Australia, for example, aboriginals receive about half as much income as non-aboriginal. In Mexico, for example in municipios where less than 10% of the population is indigenous, only 18% of the population is below the poverty line. But where 70% of the population is indigenous, the poverty rate rises to 80%.*"

The *Human Development Report* (UNDP 1999), entitled *Globalisation with a Human Face*, draws attention to the era of globalisation which could benefit the lives of people everywhere, but which also poses a challenge to ensure that the benefits are shared equitably and that the related interdependence works for the people, and not for profits. Among the arguments put forward by the Report, that globalisation requires leadership, are the fact that poor people and poor countries are running the risk of being pushed to the margin by globalisation which controls the world's knowledge, and that narrowing the gap between rich and poor should become more explicit global goals.

The subsequent Human Development Report (UNDP 2000), entitled *Human Rights and Human Development*, signalled the importance of respecting human rights in human development, which heralded the launching of the *Millennium Development Goals* (MDGs) by the United Nations in 2000. The declaration of the MDGs encompassed eight international goals which had to be realised by 2015.

In this first major concerted action at the global level, all 189 United Nations Member States committed themselves to the fulfilment, supported by about 22

international organisations of the eight Millennium Development Goals by 2015, of which the first goal was to eradicate extreme poverty and hunger. This was sub-divided into 3 targets: (a) halve, between 1990 and 2015, the proportion of people living on less than $1.25 a day; (b) achieve decent employment for women, men, and young people; and (c) halve, between 1990 and 2015, the proportion of people who suffer from hunger.

The following *Human Development Report* (UNDP 2003), entitled *Millennium Development Goals: A Compact Among Nations to End Human Poverty,* further underscored the United Nations' highest priority of poverty eradication at the beginning of the new century. The unique declaration of solidarity and determination to reduce poverty in the world in 15 years encompassed the international efforts by all member states: "*to eradicate poverty, promote human dignity and equality and achieve peace, democracy and environmental sustainability.*"

The *Human Development Report* (UNDP 2011), entitled *Sustainability and Equity: A Better Future for All*, emphasises that the urgent global challenges of sustainability and equity must be addressed together in both national and international policies in order to sustain the human development progress for most of the world's poor majority, not only for future generations, but also for those living today.

The United Nations Report of the Millennium Development Goals (UN 2015a) documents the results in terms of the largely successful completion of the MDGs, as Ban Ki-Moon, the Secretary-General of the United Nations contended that: "*The MDGs helped to lift more than one billion people out of extreme poverty, to make inroads against hunger, to enable more girls to attend school than ever before and to protect our planet.*" However, as the overall progress has also bypassed minority groups such as women, the lowest on the economic ladder, and the disadvantaged because of age, disability or ethnicity, the inequalities continue to persist while progress has been uneven.

Indeed, as mentioned above, the proportion of people living in extreme poverty —on less than $1.25 a day—in the developing countries had dropped to 14% in 2015, while globally, the number of people living in extreme poverty has declined to 836 million in 2015, which, however, remains an unacceptably high number. Another difficulty which emerged in the strategy is that about half of the 155 member states lack adequate data to monitor poverty and, by consequence, the poorest people in these countries tend to remain invisible. During the 10-year period of time between 2002 and 2011, as many as 57 countries (37%) had none or only one poverty rate estimate available (cf. UN 2015a).

The reduction of the number of people living in extreme poverty on the globe in 2015 is shown in Fig. 4.1, documenting, that during the time of the implementation of the MDGs, i.e. from 2000 up to 2015, the absolute number of people living in extreme poverty globally fell from 1.75 billion 1999 to 836 million in 2015. The United Nations *Millennium Development Goals Report* (2015) not only shows that the number of people worldwide living on less than $1.25 a day has been reduced by half from its 1990 level, but also that the world's extremely poor people are distributed very unevenly across regions and countries.

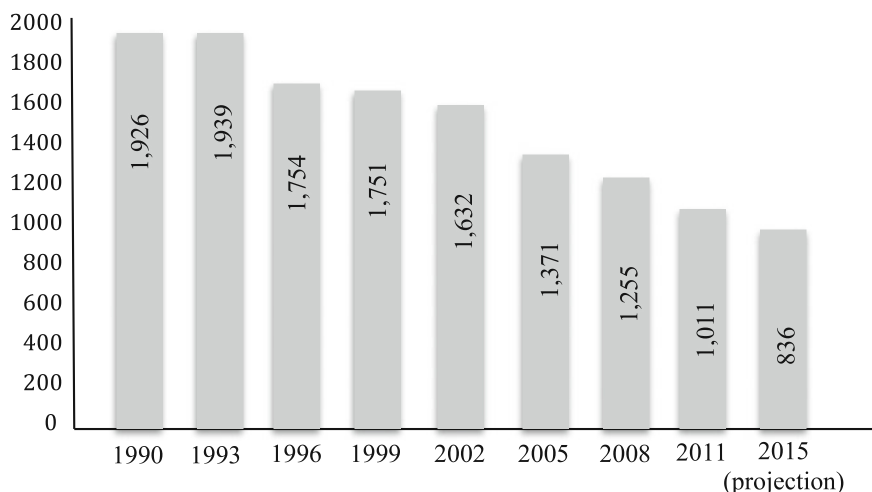


**Fig. 4.1** The number of people living in extreme poverty has declined by more than half since 1990. Number of people living on less than $1.25 a day worldwide, 1990–2015 (millions). *Source* The Millennium Development Goals (UN 2015c)

The overwhelming majority of people living on less than $1.25 a day are only living in two regions, Southern Asia and Sub-Saharan Africa, while they account for about 80% of the global total of extremely poor people. In addition, nearly 60% of the world's 1 billion extremely poor people lived in just five countries in 2011: India, Nigeria, China, Bangladesh and the Democratic Republic of the Congo (ranked from high to low; cf. UN 2015a). The lessons learned from the MDGs experience are also reflected in the new United Nations *Post-2015 Agenda for Sustainable Development and Sustainable Development Goals* (SDGs): "*We need to tackle root causes and do more to integrate the economic, social and environmental dimensions of sustainable development*." (cf. UN 2015b).

The recent *Human Development Report* (UNDP 2015), entitled *Work for Human Development*, draws attention to a broader view of work which goes beyond jobs, also taking into account unpaid care work, voluntary and creative work (Table 4.2).

The Report underscores the important fact that work enables people to earn a livelihood and become economically secure, forming one of the basic requirements for equitable economic growth, poverty reduction and gender equality. Following the completion of the United Nations' eight *Millennium Development Goals* (MDGs) in 2015, in which the alleviation of poverty had already been ranked as the number one goal, the United Nations recently listed poverty eradication as the foremost of the 17 objectives in its new *Post-2015 Agenda for Sustainable Development Goals* (SDGs). The highest priority of poverty reduction has also been recognised by most world leaders at the World Summit in September 2015. Adopted in the *Post-2015 Agenda for Sustainable Development*, poverty

**Table 4.2** Countries with the most people in multidimensional poverty

| Population in multidimensional poverty | | | |
|---|---|---|---|
| Country | Year | Millions | Percentage |
| Ethiopia | 2011 | 78.9 | 88.2 |
| Nigeria | 2013 | 88.4 | 50.9 |
| Bangladesh | 2011 | 75.6 | 49.5 |
| Pakistan | 2012/2013 | 83.0 | 45.6 |
| China | 2012 | 71.9 | 5.2 |

*Source* Human Development Report Office (2015) calculations using data from Demographic & Health Surveys, Multiple Indicator Cluster Surveys & National Household Surveys

eradication in all its forms and dimensions, including extreme poverty, has become today's ultimate challenge for the next one-and-a-half decades, and an indispensable requirement to attain sustainable development around the globe (cf. UN 2015a, b).

## 4.4 The 'Missing Link' in the UN/WB Poverty Reduction Policies

For many observers, the problem of the disgraceful condition of poverty still affecting such large proportions of the world's population today seems to have no solution and they see previous efforts for its reduction as only worsening the position of the poor in the end. Some have interpreted the transfer of poverty from one generation to the other even as a manifestation of a persistent *'culture of poverty'*, where the poor are blamed for their problems of human suffering and wasted lives (cf. Lewis 1959). Although pessimism has been growing that at a certain point, the global problem of poverty can hardly be solved, the reasons to remain optimistic and contribute to the realisation of the first of the *Millennium Development Goals* of poverty reduction by the Year 2015 are manifold as they are not only intended for the poor, but also to the non-poor people of the world (UN 2000).

Among these reasons are the fact that poverty basically refers to wasted lives: lives of people who could have realised their potential and contributed to the improvement of the society and its people. Also, poverty often leads to desperation, begging and crime. In many cases, poor people are usually more susceptible for problems of health and disease, including epidemics, bad employment hazards, HIV/AIDS and malnutrition-related high rates of morbidity and mortality. Another reason for the reduction in the poverty of large segments of the population refers to their potential of untapped resources, as Prahalad (2004) shows, that the poor are not a burden, but rather create an opportunity for simple production models, low costs and vast marketplaces. A more critical reason for the developed nations is that the growing number of the poor eventually could cause the breakdown of the 'failed states' which cannot anymore cope with the demands of growing numbers of poor

people who resort to political violence, conflict and civil war. Posing a threat to the national security of American and European states, such crises have recently even led to military interventions by the USA, UN or NATO forces such as in Honduras, Serbia, Somalia and Libya. In this context, also the growing numbers of—legal or illegal—immigrants as poor fortune hunters from poor Latin-American and African countries into respectively North America and Europe taking unskilled jobs and living in slums form an additional reason to reduce the poverty in their homelands.

Over the past decades, specific ad hoc actions have been undertaken by international organisations to provide support to the poor and low-income families, often focused on specific target groups which were in need of emergency aid as the result of natural disasters, civil wars or regional conflicts. In this context, Gunatilaka & Kiriwandeniya (1999) refer to the *Triple R Framework*: *relief, rehabilitation* and *reconciliation* as part of the introduction of social safety nets.

The intimate interconnections between development and poverty, widely observed in the practical setting of development programmes, required the construction of a broader framework of sustainable development and poverty reduction for international development cooperation. Back in 1987, the *Brundtland Report* (WECD 1987) paved the way for such a holistic development paradigm which surpassed the limited economic approach towards the exploitative use of natural resources, then dominant among international organisations including the World Bank. The *Brundtland Report* (WECD 1987: 40) clearly indicates that in order to achieve sustainable development, there is a need for: *"a type of development that integrates production with resource conservation and enhancement, and that links both the provision for all of an adequate livelihood base and equitable access to resources."* The implication of this new way of development thinking is, as Mestrum (2003: 50) contends, that: "*Sustainable development, then, is the process for meeting all people's needs, for today and tomorrow. Poverty eradication will be its outcome, due to the equitable distribution of the available resources.*"

The combined approach towards poverty reduction for sustainable development has further been adopted in international strategies which have operationalised the direct relationship between poverty alleviation and sustainable development, most manifest in biodiversity conservation, such as underscored by the *Convention on Biological Diversity on Traditional Knowledge, Innovations and Practices* (UN CBD 1992) and the Millennium Ecosystem Assessment (2005).

Previously, the United Nations Conference on Environment and Development—Agenda 21 (WCED 1987) had already been implementing such a holistic view of development: "*whose primary goals include the alleviation of poverty; secure livelihoods; good health; quality of life; improvement of the status and income of women and their access to schooling and professional training, as well as fulfilment of their personal aspirations; and empowerment of individuals and communities*."

Since then, several United Nations strategies started to focus on human development, in which poverty eradication is conceptualised as an important step towards sustainable development in which human rights are directly involved. Structural, multilateral strategies have predominantly been designed and

implemented by international organisations such as the United Nations, the World Bank, and a number of NGO's. Among the major strategies which these organisations implement to try to reduce poverty on a worldwide scale are the joint efforts to achieve socio-economic growth, to increase international development cooperation, to induce a redistribution of wealth, to promote birth control, or to provide microcredit to the poor and low-income families.

As mentioned before, in September 2000, at the beginning of the Third Millennium, the Member States of the United Nations unanimously adopted the *Millennium Development Goals* (MDGs) (UN 2000). These goals emerged from the agreements and resolutions of various development conferences organised by the United Nations in the course of the 1990s, committing the international community to a common vision of development as a strategy in which human development and poverty reduction receive the highest priority. Poverty reduction became an important component of a global package for human development. In general, the objective of the MDGs was to serve as a guidepost and focus the efforts of the world community on achieving significant, measurable improvements in poor people's lives.

Among the 8 MDGs, the eradication of extreme hunger and poverty by halving the proportion of people living on less than $1 a day and halving malnutrition by 2015 became the prime aim of the United Nations, embedded in subsequent goals of the realisation of improvements in education, gender equality, maternal and child health, treatment of major diseases such as HIV/AIDS and malaria, environmental stability, and fostering a global partnership for development, especially with the poorest countries.

By the end of the period of 2015, as set by the MDGs, a first evaluation of the realisation of these goals has been provided by the *Millennium Development Goals Report* (UN 2015c). The Report provides a final assessment of global and regional progress towards the MDGs since their endorsement in 2000. Although it seeks to show that significant progress has been made across all goals, and that the global efforts to achieve the MDGs have saved the lives of millions and improved conditions for many more around the world, the report has to acknowledge an uneven progress and shortfalls in many areas, which are in urgent need to be addressed without delay.

According to the estimate used by the United Nations, the number of people in extreme poverty, defined as having less than $1.25 a day to live on, has fallen from 1.9 billion in 1990 to 836 million in 2015, i.e. somewhat more than the halving called for in the first MDG on poverty reduction. In proportional terms, that corresponds to a drop from nearly half the population of developing countries living in extreme poverty to only 14% remaining below the $1.25 a day line.

In the process, the Administrator of UNDP, Helen Clark (2014: iv) conceded that: "*…overall global trends are positive and that progress is continuing. Yet, lives are being lost, and livelihoods and development undermined, by natural or human-induced disasters and crises*". In her opinion, eradicating poverty will be a central objective of the new UNDP Agenda for 2030. In this context, however, some scepticism has been expressed about the objectivity of the measurement of

'progress' against the different goals, given the difficulties encountered in gathering and comparing the statistical data over the past 15 years from among the participating countries. In the same way, the publication of the United Nations Millennium Development Goals Report (2015a) has also given rise to several expressions of disappointment and criticism, focused on the limitations of the realisation of its goals, as the approach has generally been dismissed as a mere continuation of 'top-down' as opposed to 'bottom-up', largely directed by the donor countries, and as such subsequently implemented by most national planning agencies. Although some trends indicate that progress has indeed been made in most countries, especially with regard to the goals of eradicating poverty and improving access to education, these trends have been uneven across countries and regions, as well as among social groups.

In addition, the inclusion of the objectives for political and cultural rights of the target population, such as those contained in the *Millennium Declaration,* have so far largely been ignored. Moreover, the rights of the people, as adopted by the United Nations General Assembly back in 1948, and reaffirmed by UN Member States many times since, have also been missing in the MDGs' approach. As Article 1 of the Universal Declaration of Human Rights (1948) states: "*All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood.*", principally, the local peoples' indigenous knowledge systems as well as their indigenous institutions should have received much more attention in the global development framework of the MDGs. Although a reference is made to the 'importance' of the Universal Declaration of Human Rights and 'respect for all human rights', some observers such as the Yale Campuspress (2015) are concerned that the newly adopted Sustainable Development Goals (2015) promote a false sense of success, giving room to governments to go slow on the realisation of the human rights of their population groups.

Closely related are the critical observations that the MDGs have focused attention on average progress, and in doing so have left the persistent inequalities virtually unnoticed. In some cases, the positive assessment of national intervention programmes has blurred the attention for the needs of disadvantaged groups of local communities, including the structurally poor and low-income families.

When in September 2015, the new global *Sustainable Development Goals* (SDGs) of the *Post-2015 Sustainable Development Agenda* of the United Nations (2015a: 1) were adopted by a large number of Heads of States, all member states committed themselves to working vigorously for the full implementation of this Agenda by 2030. The related publication of the UN Report *Transforming our World: The 2030 Agenda for Sustainable Development* (2015b): "*a new plan of action for people, planet and prosperity*", recognises that: "*eradicating poverty in all its forms and dimensions, including extreme poverty, is the greatest global challenge and an indispensable requirement for sustainable development*." The huge ambitions of the *2030 Agenda for Sustainable Development* encompass 17 Sustainable Development Goals (SDGs) and 169 targets which seek to build on the previous *Millennium Development Goals*, and "*complete what they did not achieve*" The new SDGs are set

to integrate and balance the three dimensions of sustainable development: the economic, social and environmental, over the next 15 years. Following the completion of the MDGs in 2015, other international organisations including the World Bank and the Oxford Poverty & Human Development Initiative (OPHI) provided a follow-up to the new targets of the MDGs by making an effort to reconsider their approaches towards the continuing struggle against the global problem of relative poverty, still rampant among about 4 billion people around the world. In its *Report of the Commission on Global Poverty* (World Bank 2016d), the World Bank joins the new *Sustainable Development Goals* of the *Post-2015 Agenda* (United Nations 2015) in the formulation of their primary development goal, being the eradication of poverty by 2030, announcing its two overarching goals: "*the end of chronic extreme poverty by 2030; and the promotion of shared prosperity, defined in terms of economic growth of the poorest segments of society*." In its ambitious objective to measure global poverty over time, the World Bank also seeks to explore alternative approaches to reach more realistic estimates, also using non-monetary indicators (cf. World Bank 2016d).

In this context, it is interesting that the position of one of the main target groups in global poverty reduction, i.e. the indigenous people, receive at least some—but still marginal—attention, albeit only when it comes to sub-national poverty measurement, encapsulated in the concept of *'within-country disaggregation'*. A recent report of the *United Nations Permanent Forum on Indigenous Issues* (UNPFII) (2016) estimates that there are still some 370 million indigenous peoples living in 70 countries across the world. In view of the historical process of exploitation and marginalisation of these indigenous groups, it is not surprising that evidence underscores that they are suffering most from much higher poverty rates. The recent study of the World Bank (2016e) in Latin America, where an estimated 42 million indigenous people are living, similarly documents that they face poverty rates which are: "*on average twice as high as for the rest of Latin Americans*." Measured in terms of the percentage of people living on less than the International Poverty Line ($1.25 PPP in the late 2000s), 9% were below, compared with only 3% for non-indigenous people, based on a weighted average for Bolivia, Brazil, Ecuador, Guatemala, Mexico, and Peru (cf. World Bank 2016a; Calvo-Gonzãlez 2016).

Meanwhile, the *Oxford Poverty & Human Development Initiative* (OPHI) has extended its input to the controversial measurement of global poverty by research which seeks to contribute to an integrated poverty reduction framework, based on Amartya Sen's capability approach. As indicated in the *Introduction*, this framework incorporates multiple interconnected dimensions of poverty and wellbeing, which seeks to provide policy-making with adequate data and foster the international debate on poverty reduction and development. In 2010, UNDP had decided to introduce the *Multidimensional Poverty Index* (MPI) which uses micro-economic data to assess the percentage of households which are confronted with overlapping deprivations in three dimensions—education, health and living conditions. In the same year, Alkire and Santos (2010) had analysed poverty across 78% of the world's people in 104 developing countries using the MPI, releasing the results in advance of the *Human Development Report* (UNEP 2010). In a recent approach,

Alkire et al. (2016) developed a new methodology to measure multidimensional poverty in conjunction with chronic poverty, wellbeing and inequality, useful not only for targeting and monitoring social policies, but also for measuring poverty. In addition, brief survey modules have been developed for the five 'missing dimensions' of poverty data which appear to be important to deprived people, but have so far been overlooked in large scale surveys: quality of work, empowerment, physical safety, without shame and psychological wellbeing.

Despite the above-mentioned renewed and extended approaches to the eradication of global poverty before 2030, promoted by the United Nations (2015b), and the World Bank (2016a), based on 'lessons learned' and supported by the confident statements of the United Nations and its Member States (UN 2015b): "*We are determined to ensure that all human beings can enjoy prosperous and fulfilling lives and that economic, social and technological progress occurs in harmony with nature*", all the related strategies show a serious, and for some a rather incomprehensible 'Missing Link' in the well-intended efforts to eradicate poverty in the course of the next one-and-a-half decades*: the integration of the target group par excellence, i.e. the indigenous peoples and their systems of knowledge, beliefs, practices and institutions.*

Indeed, a closer review of the above-mentioned Reports focused on the 17 SDGs and the related 169 targets, from a neo-ethnoscience emic perspective on the position of indigenous people in the developing countries with regard to achieving poverty reduction for all by 2030, reveals hardly any substantial reference beyond some general lip-service, while these groups together are currently estimated to make up some 370 million indigenous peoples living in 70 countries across the world, as estimated by the United Nations *Permanent Forum on Indigenous Issues* (UNPFII 2016). Their substantial number, their vast body of indigenous knowledge and their significant place in human history merits the recognition and integration of their indigenous systems and institutions into a more participatory, 'bottom-up' approach required to attain the reduction of poverty on a global level.

On the contrary, hardly any special reference is made to the considerable group of the indigenous peoples and their knowledge systems around the world within the context of global poverty reduction, neither in the *Millennium Development Goals Report* (UN 2015a), nor in the *subsequent Post-2015 Agenda for Sustainable Development and Sustainable Development Goals* (UN 2015b). Although the previous World Bank Report (1998/1999) entitled *Knowledge for Development* did recognise the significant role of indigenous knowledge for development, and the recent Report of the World Bank (2017), entitled *Monitoring Global Poverty,* also makes a reference to the position of indigenous peoples with regard to the issue of rural/urban disaggregation, no further indication of specific strategies is mentioned for either the integration of local and global knowledge systems or the realisation of the 10 recommendations proposed for monitoring extreme poverty in the coming years up to 2030.

The conclusion is that despite their position as an important and considerable target group of stakeholders and participants in the concerted efforts to achieve poverty reduction, the indigenous peoples and their knowledge, beliefs and

practices continue to be largely left outside the poverty reduction approaches of the major international organisations and agencies, rendering them a *'Missing Link'* in the design and implementation of strategies to achieve sustainable community development for all by 2030. In this respect, the paradigm shift in global development cooperation would still need a further elaboration of its principles towards achieving a community-based knowledge integration strategy with special attention for poverty reduction among the indigenous peoples and their knowledge systems. The following paragraphs seek to further substantiate the efforts to bridge this gap by the IKS-based integration strategy of local and global systems in terms of *Integrated Microfinance Management* (IMM) and *Integrated Community-Managed Development* (ICMD) through the indigenous institutions in order to provide an IKS-based contribution to the realisation of global poverty reduction as today's highest challenge for all people worldwide in the next decade.

## 4.5 Neo-ethnoscience: Indigenous Knowledge Systems and Development

After the period of the beginning of the second half of the 20th century, marked by a growing interest in the cultures and worldviews of indigenous peoples and their knowledge systems which culminated in the emergence of ethnoscience as the study of indigenous peoples from an emic, i.e. cultural relativist's point of view, the 1980s witnessed a functionalist approach to study the role of indigenous knowledge systems within the context of socio-economic development in the developing countries. This radical reorientation emerged from the practical field of international development aid and cooperation, where in a growing number of cases the imported systems of knowledge and technology from the West often showed not to catch on or to link up well with indigenous cultures and their knowledge systems. The failure of the Transfer-of-Technology (TOT) development paradigm became particularly visible in the 'mismatch' between endogenous and indigenous systems of knowledge and technology, where indigenous knowledge had been operational over many generations in several sectors of the community.

Following such reassessment and revaluation of indigenous knowledge in the field in various dynamic sectors of the communities, in which indigenous knowledge and practices—albeit often ignored in the past—eventually proved to provide valuable contributions or sometimes even better alternatives for imported knowledge and technology, a growing number of ethnoscientists started to study, analyse and promote indigenous knowledge systems in the development process, often with remarkable success in various sectors. The new, dynamic field of the study of transcultural development from the participant's point of view soon started to question the effectiveness of the out-dated Transfer-of-Technology paradigm (cf. Chambers et al. 1989; Titilola 1990; Reijntjes et al. 1992; Warren et al. 1995).

The academic interest in indigenous knowledge systems, particularly among the so-called 'primitive' peoples in the tropics, however, had initially been dominated by cultural anthropologists who tended to highlight and document the exotic, non-Western aspects of indigenous cultures, far removed from practical interventions of development and change, often in an effort to 'protect' indigenous cultures from Western modernisation. Coming to terms with the principle of cultural relativism—the outsider's understanding of an individual's beliefs and behaviour in terms of that individual's own culture—the field of cognitive anthropology had evolved into ethnoscience, which in turn transformed into the more development-oriented field of neo-ethnoscience of the 1990s (cf. Warren et al. 1995).

While initially, anthropologists facing the dilemma of their own bias towards the right of self-determination of indigenous peoples—and indigenous knowledge systems—while at the same time protecting them as it were against influences from outside, where local people should continue to focus on their own culture for their life and livelihood, the reality of recent global processes of communication, acculturation and globalisation have rendered such views rather outdated. As mentioned in the Introduction, this irreversible process formed the basis for the neo-endogenous approach to development. Although some anthropologists have recently been actively engaged in efforts to develop 'applied anthropology', their work has mainly been focused on securing a niche for themselves in the current international debate on culture and development (cf. Sillitoe 1998; Sillitoe et al. 2002; Purcell and Onjoro 2002; Halani 2004). In this context, Ellen (2002) rightly refers to: "*Anthropology's unresolved relationship with development*".

The misguided critique expressed by anthropologists Purcell and Onjoro (2002), that ethnoscientists involved in development programmes, such as Warren et al. (1980), Warren (1991) and Warren et al. (1995) would be biased towards the promotion of a technological form of development focused on material progress, not only denies the indigenous peoples' own right of self-determination to opt for the integration of particular knowledge and technology—material or immaterial—pertaining to their improvement in health, agriculture and natural resources management at their convenience, but also reflects the standpoint of theorists who tend to overlook the practical aspects of expressed needs in international development cooperation in the field. The privileged role which Purcell and Onjoro (2002) claim in their model for the ethnographer as 'agent and facilitator' further reveals their presumed position. In this context, Crossman and Devisch (2002) contend that the weight of the imposed Western rational scientific tradition and the Rostovian development model have prevented the development of endogenous, context-specific systems of knowledge. Indeed, in their view: "*anthropology failed to legitimise indigenous knowledge and avoided dealing with the whole issue of plural or alternative knowledge when it had intimate access to local communities the world over*."

While other anthropologists such as Clammer (2005) and Kassam (2009) recognise that even anthropologists cannot fully comprehend and appreciate the holistic system of indigenous knowledge, mainly as they are trained in the rationalistic Cartesian philosophy of Western science, the new ethnoscientists—either from the communities or from outside—have further developed a holistic and

emic perspective on indigenous peoples and their knowledge systems with a view to constructing a less normative, but more realistic picture of the complex process from a multidisciplinary point of view. Such a new ethnoscience approach would also support the indigenous peoples' right to engage in the international development process on their own terms, referred to as '*ethno-development*' (cf. Stavenhagen 1986).

As transpires through the above-mentioned studies by Warren et al. (1980), Warren (1991), Warren et al. (1995) and Toledo (2001), sustainable community development does not merely involve the provision of consumer goods and services to local communities, but rather aims at enabling indigenous people to use and control their own resources and determine their own life on the basis of their choice of material as well as immaterial elements. Notwithstanding their limitations in dealing with processes of development and change, most anthropologists agree that despite the historical, theoretical and methodological obstacles, development cannot be effective unless indigenous knowledge is part of the development process (cf. Sillitoe et al. 2003). Indeed, historically, indigenous knowledge as 'local knowledge' has been, and largely continues to be regarded as inferior to global knowledge being the subject matter of modern science, still reflecting the remnants of the former Western colonial view on indigenous peoples of the 18th and 19th centuries.

In view of the spiritual factors as significant aspects of the indigenous knowledge systems as part of the indigenous cosmologies—or worldviews—and philosophies of nature and the environment, which have largely been left out of the area of interest by modern science, primarily since appropriate methodologies have still been incapable to comprehend such often 'invisible' factors, the integration models should accommodate a holistic approach in order to include all relevant categories of factors. In contrast to the concept 'cosmology' used in the science of physics and astronomy as the study of the origins and evolution of the universe, here, cosmologies specifically refer to sets of indigenous knowledge, beliefs, interpretations and practices of cultures related to explanations about the role and the meaning of humans, life, and the world within the universe or cosmos in the past, present and future.

The cosmologies of indigenous societies are generally characterised by respect for nature and for human wellbeing, and there is often an appeal to keep a balanced coexistence between all three worlds in the universe, because people, ecosystems, the biosphere and cosmos are defined as a network, composed of common components of matter, energy and spirit. Most relevant for development is the fact that cosmologies and indigenous knowledge systems are used as key references for local decision-making concerning matters such as the use of natural resources, the achievement of sustainable management of forests, the extent of human demographic levels and bio-social synergies, and also to establish peace among and within neighbouring communities (cf. Reichel-Dolmatoff 1996; Millar 1999; Kearney 2008).

In a recent study of the concept of cosmovision in Africa, Millar et al. (2008) shows an elaborated representation of the constellation of forms of indigenous

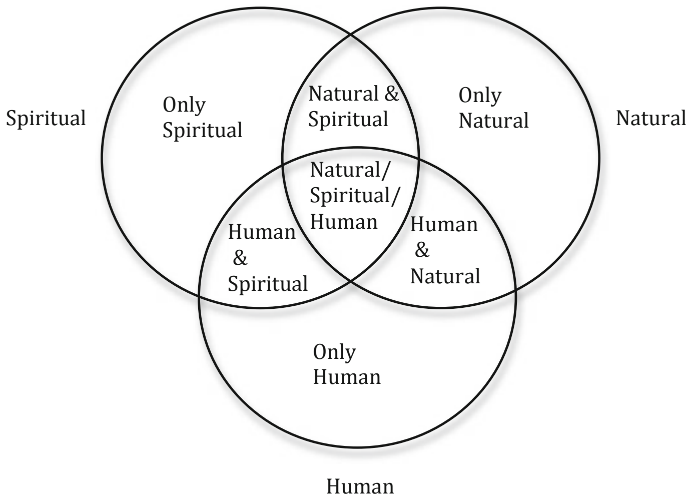


**Fig. 4.2** Constellations of knowing from a cosmovision perspective. *Source* Millar et al. (2008)

bodies of knowledge, which centres mainly on the human, spiritual and natural world, as depicted in Fig. 4.2.

In Fig. 4.2, the three (3) circles are depicting the African worldviews which centre mainly on the human, spiritual and natural world. The interaction of the three worlds implies the following constellations of knowledge:

- knowledge resulting from social interactions only;
- combination between the social and natural;
- combination between the social and spiritual;
- knowledge resulting from natural interactions only;
- combination of the natural and spiritual;
- knowledge resulting from spiritual only; and
- combination of social, spiritual, and natural.

According to Millar et al. (2008): "*these constellations highlight the heterogeneity and complexities of African Sciences and therefore engendering different bodies of knowledge and sciences that underscore the development of Africa and this contrasts the western science*." His conclusion that research of the heterogeneity and complexities of African Sciences should not only focus on the horizontal level of material and social phenomena, but especially on the 'vertical' level of the higher order discourses of the spiritual aspects, rendering a holistic approach necessary, and linking up well with the concept of the LEAD Programme of the comprehensive IKS-based model of integration of local and global knowledge systems, as elaborated in the next Paragraph.

Similarly, Naamwintome and Millar (2015) describe how the historical process of indigenous worldviews or cosmologies in African society have resulted in the development of useful knowledge, knowing and their epistemologies. Nature, peoples, and the spiritual world are prominent features within the African traditional worldviews, which not only guides the sustainable use of natural resources, but also prescribes how community decisions are taken, local problems and conflicts are solved and in what way the rural people organise themselves.

In their study, Naamwintome and Millar (2015) argue, that: "*if Africa is to make a significant presence in the 'knowledge arena' (if not dominate it), the strength of it is in the indigenous knowledge and the cultures of Africa*." The authors substantiate their pragmatist position that it is necessary not only to harness indigenous knowledge in research, teaching, development, and policy-making, but also that indigenous knowledge is a political instrument requiring the development of a critical mass calling for a new paradigm for higher educational visions for tomorrow's Africa.

Interestingly, there is a striking resemblance in the conceptualisation and representation of these indigenous cosmovisions which have been studied and documented in Sub-Saharan Africa and South-East Asia. These cosmologies are generally depicted in a configuration of three partly overlapping worlds—the human, spiritual and natural world—in which humans are taking a central position. The relations between humans and each of these worlds are basically sacred and harmonic—and have to remain or be restored in order to maintain the cosmic balance, often by the performance of rituals (cf. Millar 1999; Agung 2005; Saefullah 2019).

The importance of the interaction and relationships between humans and their diverse environment in terms of the social, natural and spiritual worlds, which have to be brought continuously into a harmonic balance, has been studied in South-East Asia by Agung (2005) among the indigenous Balinese people and their communities, where the Balinese cosmology of *Tri Hita Karana* is playing a key role in the peoples' conservation behaviour with regard to the island's rich bio-cultural diversity. Similarly, the study by Saefullah (2019) documents the cosmology of the Sundanese people in West Java, known as *Tri Tangtu*, which is guiding the local peoples' ways of life. In Chap. 10, a comparison is made between the representation of the Balinese and Sundanese cosmologies, which reveals certain universal characteristics, most relevant for the process of sustainable community development.

At the beginning of the 21st century, a new impetus was given to the development, promotion and protection of indigenous knowledge systems within an international political framework of transformation and democratisation, particularly with regard to the indigenous communities in developing countries. By that time, the potential of indigenous knowledge for sustainable development had already gained particular attention in health, agriculture and natural resources management, and bio-cultural diversity conservation, where indigenous knowledge, beliefs and practices showed to be complementary to Western knowledge systems, or sometimes even provided more suitable alternative solutions.

As mentioned above, at the international level, organisations including the *World Bank*, the *United Nations Development Programme* (UNEP), the *United Nations Educational, Scientific and Cultural Organisation* (UNESCO) and the *World Health Organisation* (WHO) started to adopt several declarations on the unique position of indigenous peoples and the appropriate protection and use of their knowledge systems in development around the globe. These leading organisations have now entered the new era by promoting a process of sustainable development, of which the practice has shown new opportunities to integrate the great potential of indigenous knowledge systems, still functioning at the community level. Odora Hoppers (2002a) refers to the present 'African Renaissance', which: "*in particular sets forth an agenda that combines identity reconstruction and innovation, human rights, sustainable development and democratisation in South Africa and throughout the African continent*."

## 4.6 The Integration of IKS for Sustainable Community Development

The theoretical impediments to approach indigenous and modern knowledge and science on an equal basis—also referred to as 'parity'—have been dominating the discourse for a long time, leading to a general consensus that both philosophical and hierarchical power relations have been blocking a balanced, equal position of both in a universal framework of the philosophy of sciences (cf. Agrawal 1995; Posey 2002). Another theoretical problem is that in contrast with modern knowledge systems on the basis of which different monodisciplines have been structured in separate components, indigenous knowledge systems are built up of multidisciplines, generally embedded in a web of interlinked elements of knowledge, beliefs and practices, which constitutes the local holistic cosmological framework.

Similarly, the methodological difficulties to study, analyse and fully understand indigenous knowledge systems from an outsider's point of view—such as predominantly present among Western-trained scientists—have attracted much attention in the social sciences. As mentioned above, recently, the Leiden ethnosystems approach to the in-depth study, analysis and understanding of indigenous knowledge systems has been elaborated to encompass three methodological principles of respectively the 'Historical Dimension' (HD), the 'Participant's View' (PV) and the 'Field of Ethnological Study' (FES).

Embarking on the basic premise that every indigenous culture has a unique orientation to knowledge, beliefs and practices, represented in the way of life and survival of the community and its members, its language, and its conception of the relationship to its natural, social and spiritual environment, it seems a matter of course that a synthesised form of local and global science would be needed to construct a cross-cultural discipline capable to respond to complicated questions and problems, not least concerning poverty reduction for sustainable development

at the community level, which are here at stake. While most Universalists contend that modern Western science would be superior to indigenous perspectives on the natural world, largely because of its predictive and explanatory capabilities, multiculturalists maintain that science is not universal, but rather locally and culturally determined. In his contribution to the establishment of an effective science education in South Africa, Le Grange (2007) proposes a fresh look at the kind of science which is taught to South African school learners, in which the debate moves beyond the binary of modern science/indigenous knowledge to: "*Ways in which Western science and indigenous knowledge might be integrated are explored*."

Various attempts have been undertaken to compare, validate and integrate the various knowledge systems in an approach of endogenous, 'bottom-up' development in several sectors by scientists and experts working in the field of sustainable development, such as Reijntjes et al. (1992), Warren et al. (1995), Millar (1999), Haverkort et al. (2003), Slikkerveer (2012), and Naamwintome and Millar (2015). These sectors include not only health, education, agriculture, forestry, natural resources management, biodiversity conservation, disaster management and climate change, but also the sectors of financial, medical, and educational services, most relevant to poverty reduction and development. Authors, including Cash et al (2003), contend that the capacity of mobilising and using science and technology (S&T) is increasingly recognised as an essential component of strategies for promoting sustainable development, where the integration of indigenous knowledge and modern breeding methods, termed 'participatory plant breeding', also seek to overcome the boundaries which tend to hinder the integration of long-term knowledge accrued by farmers over many generations with the insights and methods developed by modern plant breeders.

In line with these academic efforts, a growing number of national and international policy processes for protection of traditional knowledge of indigenous peoples and local communities have been designed and implemented in various fora: at the international level, these include the UN Convention on Biodiversity (1992), the UNESCO *Convention on the Protection of Intangible Cultural Heritage* (2003), the FAO *International Treaty on Plant Genetic Resources* (2009), and the WIPO Traditional Knowledge and Intellectual Property Protection (2016).

Neo-ethnoscientists including Warren et al. (1995) have amply illustrated that embarking on the integration of indigenous knowledge systems in various settings promotes local participation as a major prerequisite for attaining sustainable development, which, in turn, is intimately interrelated with community-based poverty reduction. Some interesting models of knowledge integration from the grassroots, relevant for sustainable development at the community level, have been developed by several researchers, including Johannes (1993), Millar (1999), Odora Hoppers (2002b) and Oguamanam (2004). Since recently several attempts have been undertaken to further conceptualise, locate and integrate *Traditional Ecological Knowledge* (TEK) as one of the salient areas of integration with modern ecological science in development programmes of sustainable resource

management; it is illustrative to assess the experience as an example of IKS integration. According to Berkes (1993: 3) Traditional Ecological Knowledge (TEK) is: "*…a cumulative body of knowledge and beliefs, handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment process between local and global knowledge systems*."

Conceptualised in this way, much research has been dedicated to TEK, primarily with a view to 'extracting' TEK, validating it against Western scientific ecology and 'integrating' it with dominant Western science and management systems. However, as Casimirri (2003) contends, indigenous knowledge and systems of management have largely been marginalised.

The *Assembly of First Nations* (1995) described indigenous knowledge as consisting generally of four interlinked components including:

1. creation stories and cosmologies explaining the origins of the earth and its people;
2. codes of ritual and behaviour that govern peoples' relationships with the earth;
3. practices and seasonal patterns of resource utilisation and management, that have evolved as expressions of these relationships; and
4. a body of factual knowledge accumulated in connection with these practices.

Because of its practical potential for natural resources management and bio-cultural diversity conservation, recent TEK-research has particularly focused on the last two components of practices and factual knowledge. Figure 4.3 represents the various elements of indigenous knowledge, showing that TEK is part of a web of indigenous knowledge, in the center of which the spiritual elements of the local culture are located. The representation of the embeddedness of indigenous knowledge in a larger 'web' also identifies the 'invisible' factors of wisdom, beliefs, norms and values, as well as the indigenous institutions which guide human behaviour as key elements in the overarching, holistic worldview. While these 'invisible' elements are often overlooked by outsiders, the actual 'facts' form the components of TEK which can be understood by outsiders. In the integration process, these 'facts' are validated and subsequently removed as 'data' from this web to be applied in Western resource management programmes.

If the analogy is taken one step further, as Casimirri (2003: 3) argues, it becomes possible to see: "*that removing these data points would weaken the structural integrity of the web. Likewise, the data points are interconnected to the web and cannot be fully understood when they are removed from their context*." In other words, indigenous knowledge systems have to be considered as interconnected with the worldview concerned and as one whole phenomenon.

By consequence, knowledge integration models designed for providing a contribution to sustainable development should be holistic in their approach and also include the invisible factors represented in connection with cosmologies, such as

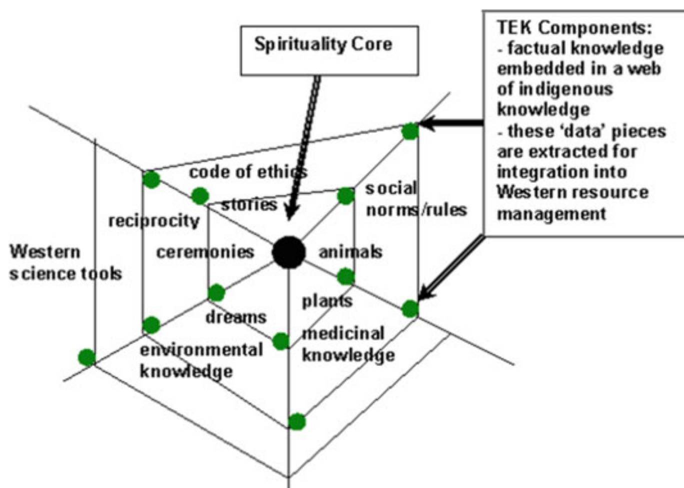


**Fig. 4.3** Conceptualisation of Traditional Ecological Knowledge (TEK) within an Indigenous Knowledge web. *Source* Casimirri (2003)

spirituality, sanctity and morality, highly relevant for local peoples' perceptions, activities and behaviour.

In the course of the previous century, the concept of indigenous culture, and in particular its specific components of knowledge, beliefs and practices, has experienced a drastic U-turn in its role in the socio-economic development of the developing countries. After a rather neo-colonial conception of culture as an 'obstacle to development', gradually the recognition evolved of the great potential of culture to guide and enhance the development process in several sectors of the society. Such a radical change of the direction of development cooperation is, as Kendie and Guri (2000: 332) rightly notice: "*largely due to the resilience of culture and its institutions, despite the imposition of Western worldview*". Other scientists have brought into the debate the role of the indigenous cosmologies and indigenous philosophies of nature and the environment, which have enabled and continue to enable the communities in developing countries to retain their culture and related institutions towards the influx from outside of influences of modernisation, westernisation and globalisation (cf. Millar 1999; Agung 2005; Saefullah 2019).

In this context, the argument is made that, because of their sustainable nature, where resources are largely utilised only for strict use and maintenance of present-day communities in order to leave a share for future generations, the indigenous philosophies of subsistence could eventually provide humankind with a non-exploitative, sustainable tool to survive on Planet Earth for a prolonged period of time (cf. Slikkerveer 1999a). Such indigenous philosophy is, as Weber (1905) has shown, in contrast with the capitalist philosophy of commercial

surplus-building, characteristic for most Western nations, exploiting and exhausting the natural resources in the shortest possible period of time without taking into account the position of resources and the needs of future generations.[3]

## 4.7 A New Role for Indigenous Institutions in Human Development

As mentioned in the *Introduction*, institutions are generally referred to as regularised practices or patterns of behaviour structured by rules and norms of the society which are widely used, and are either formal or informal. Formal institutions are rules, laws and constitutions legalised by members of the society, while informal institutions include social norms of behaviour, and conventions which prohibit or permit individuals to undertake certain activities within their social settings (cf. Metha et al. 1999; Hembram 2007; Slikkerveer 2012). Most of these authors view this timely perspective on indigenous institutions and organisations as complementary to the discourse on indigenous knowledge systems and development as the 'Cultural Dimension of Development', introduced by Warren et al. (1995). The *indigenous institutions* are often grounded in strong principles of ethno-cultural affiliation, community cooperation and organised community work over many generations, and often represent indigenous associations based on the local philosophy of mutual aid, cooperation and reciprocity. Examples have been mentioned to include indigenous village associations, farmers' associations, traditional medical associations, traditional legal councils, councils of village elders, mutual aid and reciprocity associations, informal cooperative associations, collective action groups, neighbourhood groups, community water management groups and women's groups.

In his classical study on *Local Institutional Development: An Analytical Sourcebook with Cases*, Uphoff (1986) had already made a distinction of various levels of development-related decision-making, ranging from the international level to the individual level where the middle—or local—level included three local-level institutions: the locality level, the community level and the group level. The author distinguished between an *institution* viewed as a complex of norms and behaviours which persists over time by serving some socially valued purpose, and an

[3]In his book *The Protestant Ethic and the Spirit of Capitalism* (1905), Weber wrote, that capitalism in Northern Europe evolved when the Protestant (particularly Calvinist) ethic influenced large numbers of people to engage in work in the secular world, developing their own enterprises and engaging in trade and the accumulation of wealth for investment. In other words, the Protestant work ethic was an important force behind the unplanned and uncoordinated emergence of modern capitalism. Apart from Calvinists, Weber also discussed Lutherans (especially Pietists), but also noted differences between traditional Lutherans and Calvinists, Methodists, Baptists, Quakers, and Moravians, specifically referring to the Herrnhut-based community under Count von Zinzendorf's spiritual lead.

*organisation* as a structure of recognised and accepted roles. A crucial element is that indigenous institutions generally refer to local-level institutions with a socio-cultural, endogenous base, rather distinct from exogenous institutions operational through external forces.

In order to avoid possible confusion between the terms *institution* and *organisation*, which tends to be used interchangeably, Huntington's (1965: 378) classical clarification remains valid today: "*institutions are stable, valued, recurring patterns of behaviour. Organisations and procedures vary in their degree of institutionalisation. Institutionalisation is the process by which organisations and procedures acquire value and stability*."

Thus, organisations which have acquired status and legitimacy for having satisfied peoples' needs and expectations over time have become 'institutionalised'. Blunt and Warren (1996) further clarify the distinction: marriage is an institution which is not an organisation, while a particular family is an organisation (with roles) but not an institution (with longevity and legitimacy). Following this useful differentiation, this Volume will mainly be concerned with long-standing indigenous institutions with an organisational basis in the community being endogenous as opposed to exogenous and operating at the community level.

In his analysis, Uphoff (1986: 5) also observed six categories of 'local institutions' with different advantages and disadvantages for supporting rural development, but he left out of his analysis not only 'local political institutions', since in his opinion: "*...external agencies are expected to avoid getting involved in domestic policies*", but also the indigenous institutions, to which he refered to as '*traditional*' or '*informal*' institutions. Although he recognised that they have evolved and been supported by the local people in dealing with economic, social, cultural, religious and political problems, he contended, that: "*...such institutions almost always do exist, though they may be hard to find or to work with*." Uphoff (1986: 6) also calls these 'local' institutions: "*pre-existing institutions being often parallel to the above-mentioned categories*." Although he mentioned many kinds of these 'pre-existing' indigenous institutions, such as *age grade systems*, *women's secret societies*, *craftsmen's guilds* etc., he illustrated his focus on the *formal* 'local' institutions by asserting that certain administrative roles, such as tax collector or land registrar, may have existed for hundreds of years and have later been incorporated into the formal contemporary local administration.

This Volume, however, seeks to pay special attention to these '*informal*' institutions within the context of sustainable development, because of the growing evidence of their crucial role in the development-related community-level decision-making processes, which have become institutionalised over many generations. By consequence, the use of the term *indigenous institution* in this Volume refers specifically to those local-level institutions—informal and sometimes invisible to the outsider—which are rooted in the history of the community and based on strong local philosophical principles of cooperation, mutual aid, and collective action, where the interests, resources and capacities of many community members are structurally joined together in order to achieve common goods and services for the entire community in a non-commercial way.

This perspective links up with the substantial work carried out on *indigenous knowledge systems* in various sectors of the society, which are forming the base for local-level decision-making processes, and as such essential for attaining sustainable community development. Although some authors tend to use terms such as 'traditional', 'informal' or 'customary' with regard to such 'pre-existing' institutions at the community level, this Volume prefers to adhere to the concept of *indigenous institution* as part of the new development paradigm of *indigenous knowledge systems and development*, and as such seeks to avoid previous misconceptions about indigenous knowledge as being 'static', 'geographically distant', 'something from the past', 'old-fashioned', or 'not adaptable to development and change'.

On the contrary, according to a growing number of studies, these indigenous institutions are increasingly regarded by most experts and development agencies as having specific and unique qualities which not only provide the participants with a value of self-respect, but also render their policies most contributive to achieving the objectives of sustainable community development in many sectors of the community (cf. Richards 1985; Chambers et al. 1989; Swift 1991; Warren et al. 1995; Blunt and Warren 1996; Slikkerveer 1999b; Watson 2003; Slikkerveer 2012). As mentioned above, most of these authors view this timely perspective on indigenous institutions and organisations as complementary to the discourse on indigenous knowledge systems and development as substantiating the 'cultural dimension of development', introduced by Warren et al. (1995).

As mentioned before, the informal indigenous institutions and related indigenous knowledge systems are inextricably interrelated, and as such grounded in the local cosmology since many generations. The holistic cosmologies also encompass indigenous institutions of self-help, mutual aid, cooperation and reciprocity. As these institutions have existed for many centuries in different forms, especially among rural communities, they have been responsible for guiding the individuals' behaviour within their communities and their socio-culturally sanctioned access and use of their natural resources.

The philosophy of people-based development from below assumes that participation is not only an end in itself, but also a fundamental precondition and a tool for any successful development process (Oakley 1991). Development is principally considered to be about culture and institutions are the important components which enforce cultural rules, norms and values (van Arendonk and van Arendonk-Marquez 1988). Culture is that whole complex of distinctive spiritual, material, intellectual, and emotional features which characterise a society or social group. It includes not only arts and letters, but also modes of life, the fundamental rights of the human being, value systems, traditions and beliefs (Awedoba 2007). It is evident that culture has steadily, but gradually, made inroads into the governance process and it is serving as the entering point for achieving sustainable development. In a later study, Uphoff (1992) places indigenous institutions within the context of sustainable development, involving many factors. Uphoff (1992: 3) contends that: "*One contributing factor that deserves more attention is local institutions and their concomitant, local participation*.". Other case studies in

which indigenous institutions have eventually shown to possess great potential for socio-economic development, notwithstanding certain difficulties emerging between indigenous institutions and outside institutions in the form of development agencies, pave the way for re-activating their role as powerful resources for poverty reduction pertaining to sustainable development.

In this way, Slikkerveer (2012) is further extending a more dynamic conceptualisation of indigenous institutions into a rather functional aspect of the newly-developing field of *neo-ethnoscience*, particularly *ethno-economics and development,* in which the key roles of these indigenous institutions in the local-level decision-making processes are operationalised for the realisation of sustainable community development. In this view, the particular position of poor and low-income members of the community as subjects of community solidarity and cooperation, expressed in an institutionalised form of local-level support—based on respect, equal opportunities and shared benefit from common land, natural products, and cultural goods and services—is providing an important participatory stepping stone for development-related poverty reduction activities.

While Slikkerveer (1990) documented his confrontation with dominant power structures in the Horn of Africa, in which the institutionalised Western medicine had been heavily politicised at the cost of pre-existing institutions of traditional and transitional medicine, recently Chirangi (2013) documents similarly constrained relationships which used to form an obstacle for the well-planned integration of institutions representing the traditional, transitional and modern medical systems in Tanzania. Watson (2003) documents the difficulties encountered by the German Technical Cooperation Agency (GTZ) in natural resources management among the Borana in Southern Ethiopia living on the border with Kenya, largely because of the political embeddedness of the *gada* system, an institutionalised age-grade system which has been guiding and organising the Borana society over many generations. These case studies also show that such often politically-driven obstacles can be overcome through the intermediary and input from the local-level decision making processes, facilitated by indigenous institutions and the worldviews in which they have been grounded for many generations: solidarity, mutual aid, cooperation and respect for the connected worlds of fellow humans, nature and the spirits.

The conclusions of a recent Seminar on the *Role of Local Communities and Institutions in Integrated Rural Development* held in Iran underscore that the role of local institutions, such as local government units, formal and informal local organisations including cooperatives, culture groups, and NGOs, is becoming more important for the realisation of the integration of various rural development efforts (cf. Wijayaratna 2004).

As mentioned above, the concept of *Integrated Rural Development*, introduced in the 1970s, refers to a rural development approach of the integration of a number of different, sometimes overlapping 'target' approaches, which not only suffered from a vague description of what components were actually 'integrated' in the IRD-strategy, but also the problem that most programmes were unable to solve urgent rural problems of achieving and distributing reliable food resources. A major

underlying cause of the decline of the approach has been the attitude of many development experts that their 'scientific' knowledge is superior to the indigenous knowledge of the local people who have not received formal education. The negative attitudes have been enforced by the 'top-down' bureaucratic system built up of external institutions and development agencies, which were organised along hierarchical lines hardly engendering local participation, and generally in contrast with the pre-existing indigenous institutions which have been guiding the local peoples' behaviour and way of life on an equal basis for many generations. (cf. Slikkerveer 1995; Kendie and Guri 2005; Naamwintome and Millar 2015).

However, in view of the recent, more positive experience with the careful integration of indigenous institutions into IKS-based development programmes on the basis of lessons learned in the above-mentioned cases, the new concept of *Integrated Sustainable Community Development* has shown to meet the challenge of poverty reduction for sustainable community development in Africa and elsewhere around the globe.

## 4.8 IKSIM: A New Model for Integrated Community-Managed Development (ICMD)

The international interest in local poverty reduction and sustainable development has largely been focusing on cross-sectorial socio-economic development programmes in health care, food and nutrition, environmental conservation, agricultural production, as well as in labour and employment, governance, equality and democratic representation. As mentioned before, recent changes in rural areas have led to the development of new models, such as the 'neo-endogenous development model', introduced by Ray (2001), based on the utilisation of endogenous knowledge and capacity-building, and democratisation at the community level (Ray 2001; Cabus and Vanhaverbeke 2003; Ward et al. 2005; Tolón-Becerra and Lastra-Bravo 2009).

The conceptual framework which forms the basis for the development of the model of integration of indigenous knowledge with global knowledge, known as the *Indigenous Knowledge Systems Integration Model* (IKSIM), specifically developed by the LEAD Programme for poverty reduction within the context of sustainable community development, embarks on its functionality in several approaches for the poor and low-income families as target groups, operationalised at the community level. Such a utilitarian approach seeks to functionalise indigenous institutions to overcome the conventional dualism between local and global knowledge by operating at a higher level of abstraction, where the cognitive, spiritual and moral dimensions are similarly integrated as important albeit yet 'invisible' factors, which have shown to play a strong, evidence-based role in the holistic body of indigenous knowledge, beliefs and practices.

As a result, the basic building blocks in the framework of the IKSIM model include the following nine (9) principles:

- *'target group' perspective* on the urgent challenge of poverty reduction within the context of sustainable development, specifically on the poor, low-income and marginalised groups among the indigenous peoples in the developing countries;
- *parity-oriented approach* towards indigenous and modern knowledge systems recognised as components of a body of synthesised science on an equal basis—also referred to as 'parity'—being relieved of the burden of philosophical and hierarchical power relations;
- *multidisciplinary perspective* on the integration of knowledge, beliefs and practices for achieving poverty reduction as a multidimensional configuration of humanitarian, economic, social and cultural factors operational in the context of sustainable community development;
- *multi-sector and cross-sectional approach*, focused on the operationalisation and integration of potential indigenous systems of knowledge and technology;
- *holistic approach* towards the interaction between the human, natural and spiritual worlds, conceptualised in the local cosmology as a comprehensive network of knowledge, predominately manifest in such sectors as health, education, agriculture and nutrition, natural resources management and bio-cultural diversity conservation;
- *institution-based strategy* on the functionalisation and input of indigenous institutions into integrative sustainable development programmes and projects in order to secure local participation and governance;
- *humanitarian orientation* towards all stakeholders involved, including local people, leaders and specialists, educators, ethnoscientists, development experts, government agents, etc., who are expected to make joint efforts to reduce poverty for sustainable development at the community level, in which communication, discussion and cooperation are focused on equal opportunities, benefit sharing, mutual respect, dignity and the observance of human rights in order to incite truly participatory development programmes;
- *life-long learning attitude* among all participants involved of mutual exchange of knowledge, experience and opinions contributing to the ongoing dialogue on relevant matters of integration and functionalisation of local and global knowledge systems; and
- *'bottom-up' approach* in policies and programmes towards integrated sustainable community development as a contribution to the Sustainable Development Goals of the United Nations (2015c).

After prioritising the poverty-related key components at the community level in terms of cross-sector problems, factors, aspects, opinions and procedures in close cooperation with the community representatives, the process of integration involves the participatory balancing, harmonisation and fine-tuning of relevant data collected through the execution of the participatory comparative study of the implementation

of the 'Leiden Ethnosystems Approach' as the methodological basis for the documentation, analysis, understanding, validation and selection of relevant local and global knowledge of the target community. The activities are routinely followed by the joint assessment, selection and formulation of appropriate recommendations for integrated policy planning and implementation, primarily focused on poverty reduction and sustainable community development.

In Fig. 4.4, the *IKSIM Model* is depicted as a build-up of two oval circles depicting the interacting local and global knowledge systems; this process is based

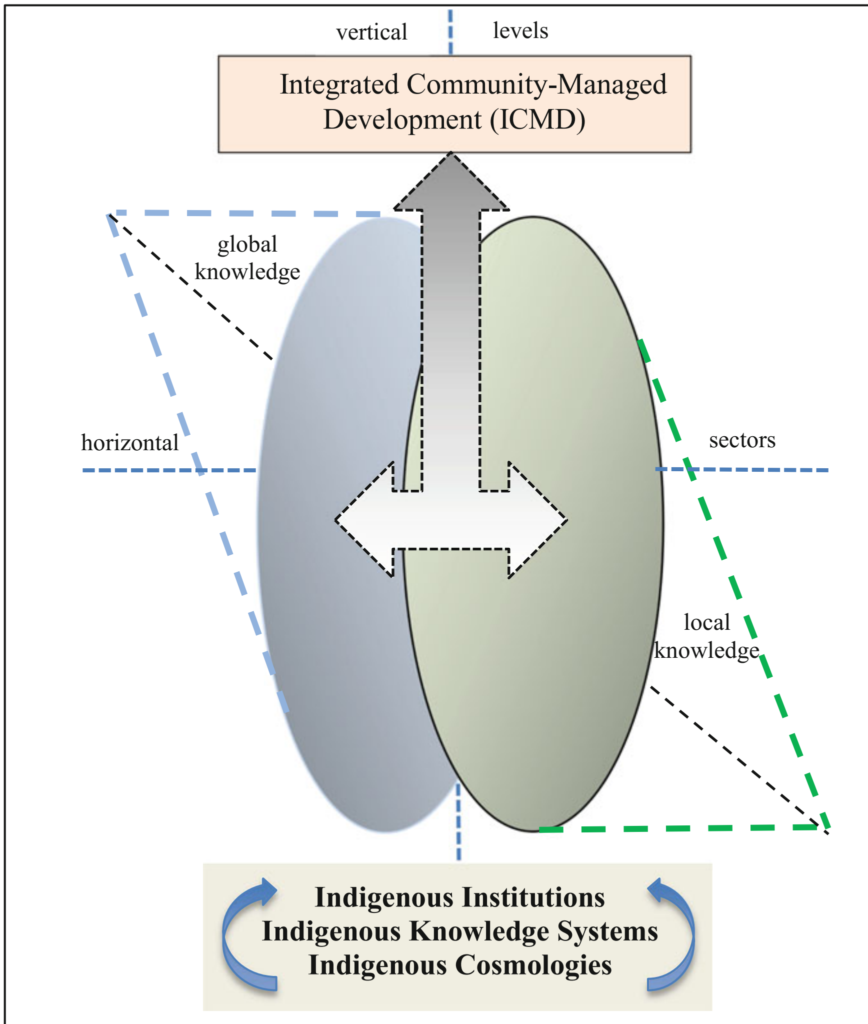


**Fig. 4.4** Representation of the *IKS-Based Integration Model* (IKSIM) of Integrated Community-Managed Development (ICMD). *Source* Slikkerveer (2014)

on the complex of the indigenous cosmology, encompassing the three interrelated worlds as the foundation of both indigenous knowledge systems and indigenous institutions, which, in turn, centers on the decision-making processes of the community members, developing the vertical 'bottom-up' approach. The model shows the key position of the indigenous institutions in the strategising process of the local participants in the implementation of the Integrated Community-Managed Development approach (ICMD). As a central concept in the lack of local peoples' participation in development programmes and projects has been the absence of interest or even ignorance among development experts and policy planners towards the target population's perspectives on their culture and their position in life; the overarching, holistic worldview has been situated at the base of the model as the stepping stone for the integration of local and global knowledge systems and institutions.

Since some recent studies in Indonesia have been documenting that for many generations, local groups are accustomed to approaching their existing indigenous institutions of cooperation, mutual aid and neighborhood support at the community level, such as *Gotong Royong*, *Silih-Metulung*, *Gintingan*, *Desa Adat*, *Banjar* and *Arisan*, the IKSIM model seeks in particular to express the key role which these indigenous institutions are playing in the daily life of the local population (cf. Agung 2005; Slikkerveer and Agung 2010; Djen Amar 2010; Ambaretnani 2012; Erwina 2019; Saefullah 2019).

In line with the above-mentioned considerations of the dynamic neo-ethnoscience approach and the neo-endogenous orientation of mid-level development planning in conjunction with the strategic involvement of indigenous institutions, the IKS-based integration model (IKSIM) seeks to contribute to the timely introduction of a new strategy of *Integrated Community-Managed Development* (ICMD) for poverty reduction and sustainable community development in Indonesia and beyond.

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**L. Jan Slikkerveer** is Professor of Applied Ethnoscience and Director of the Leiden Ethnosystems and Development Programme, Faculty of Science, Leiden University, Leiden, The Netherlands. He received his Ph.D. on his fieldwork in the Horn of Africa from Leiden University in 1983 and an Honorary Degree from the Faculty of Medicine of Universitas Padjadjaran in Bandung, Indonesia in 2005. He further extended advanced training and research in the newly-developing field of applied ethnoscience in several sub-disciplines, including ethno-economics, ethno-medicine, ethno-biology/botany, ethno-pharmacy, ethno-communication, ethno-agriculture and ethno-mathematics in combination with a focus on three target regions of South-East Asia, East-Africa and the Mediterranean Region. He is the supervisor of 25 Ph.D. students at Leiden University and has published more than 100 books and 300 articles on the subject. While he has also received a number of substantial subsidies from the European Union in Brussels for international development programmes in South-East Asia, East-Africa and the Mediterranean Region, he also conceptualised both the IMM & ICMD approaches in Indonesia, and is Senior Lecturer in the International Master Course on Integrated Microfinance Management (IMM) at the Faculty of Economics and Business of Universitas Padjadjaran in Bandung, Indonesia.