

Education and Rural Development

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Abstract: Policies and strategies of poverty reduction and sustainable rural development take education as one of key instrument. Governments together with development partners are committed and implementing the strategies to meet the target goals set to education. For this study, pertinent articles and reports on critical issues of education in rural development are reviewed. Despite effort to improve access, equity and quality of basic education in rural areas, they still remain problematic. Skill training with complementary inputs is more important but in rural areas it is inadequate or no access. Some potential opportunities of basic education are lost. To break poverty in rural areas expansion of basic education is not enough by itself. Rather it can be incentive to exist rural and cause more socio-economic chaos in urban. In developing countries, achieving MDGs within intended year seems not feasible. Strengthen the efforts to improve quality, access and equitability of basic education in rural areas. Moreover, in rural development strategies, more attention to skill training, complementary inputs and to the potential contribution of higher institutions is needed. Further strengthening financial and technical support is necessary.

Key words: Rural education, role of education, rural development

INTRODUCTION

Education is widely accepted as a key factor in achieving poverty reduction and sustainable development. However, the vast majorities of world's poor, depending on small-holed farming, live in developing countries mainly in rural areas with insufficient or lack of access to basic education. The discussion about education in rural areas is closely related to the broader rural development concept. Education has emerged as an essential prerequisite for improving agriculture, reducing poverty and living conditions of rural people.

Rural development becomes a major focal issue in national and international development agendas. One of the strategies set to poverty reduction is provision of equitable and quality basic education and for this targets have been set as Education for All (EFA) and Millennium Development Goals (MDGs). Governments and their development partners have recognized the importance of education for rural people and placed great emphasis and adopted policies and strategies to increase or improve access to quality basic education.

Education improves the individuals choices available to peoples as well as an educated population provides the type of labor force necessary for industrial development and economic growth, Schultz (cited by Fagerlind and Saha 1983; Nwomonoh, 1998).

Rural development is different than industrial development. It is concerned with enabling people to meet their basic needs and participate in the socioeconomic issues actively. As the result, the industrial and rural developing may not require the same type and amount of education. Regardless of this fact, as Nwomonoh (1998) developing countries continue to believe that educating people in the rural areas will mysteriously trigger development. But this resulted in concentration of resources in the education of the rural areas showing paradox of poor progress in rural areas.

Many developing countries, with available limited and shortage of resources, are committed and strived to achieve high expansion and coverage of basic education to meet the development goals. So, far in these areas some remarkable results are observed (Lakin and Gasperini, cited in Atchoarena and Gasperini, 2003).

The objective of this study is, through reviewing the available evidences, analyses and experiences in the role of education in rural development, to identify weaknesses pertinent to basic education in achieving rural development and to come out with some conclusions that can be taken into consideration in policy making or planning successful basic education and training for rural development.

Although, education has economic and non-economic benefits to educated individuals and to the social as a whole, this study intended to focuses on the

aspect of economic benefit of basic education to rural areas. It reviews some critical issues that are related to education and training in the context of rural development in developing countries. This study begins with an overview of educational issues and economic benefits in rural context.

EDUCATION AND DEVELOPMENT

Popularly, education has been recognized as investment on human capital and important key factor in stimulating economic growth. Most of studies confirmed that investment in education fosters economic growth and social aspects through direct and indirect effect on productivity, earnings and social behaviors (Cohn, 1979; Brimley and Garfield, 2002).

The economic effect of education extends beyond improving skills and productivity of labor; it also has positive links with other aspects of human resource developments notably such as health and fertility (Baun and Tolbert, 1985). Beyond these, it is a potential to maintain social cohesion and wellbeing and possibly contributes to political stability which creates conducive condition to achieve sustainable economic development and growth.

POVERTY AND EDUCATION

As IFAD (2001, cited in FAO and UNESCO, 2003) in the world, it is estimated that more than 1.2 billion people live in extreme poverty, spending less than a 'standard' dollar a day. About three-quarter of them are concentrated in rural areas and poverty challenges have drawn national and global attention.

The perspective in which poverty can be seen, UNDP (1997, in Hope, 2004) are the income, the basic needs and the capability perspective that pertains to the absence of some basic capabilities to function. These imply that poverty signifies not only lack of income, but also deprivation in terms of political and civil rights and the quality of life.

Education not only affects the income and the life standard but also affects the remaining other dimensions. Persons with at least basic education have enhanced political and social empowerment and capacity to participate in community governance. These combined with improved earning potentials are powerful instrument that education contributes in poverty alleviation (ADB, 2003).

EDUCATION AND RURAL DEVELOPMENT

Rural development (Nwomonoh, 1998), is improving the socio-economic and living standards of the mass of

low-income population residing in rural areas and ensuring equitable and self-sustainable development.

As late 1990s rural development stresses concepts such as empowerment and sustainable livelihoods in a broader context of poverty reduction strategy, the discussion about education in rural areas is closely related to the broader rural development concept. Both rural development and rural education focus on poverty reduction; participatory approach; community involvement; preparing rural people for on/off-farm employment, focus on gender and HIV/AIDS issues (FAO and UNESCO, 2003).

World Bank studies demonstrate education raises the production of farmers. Four years of schooling on the average appears to increase the output of farmers by about 8%. The rate of return to rural education in Korea, Malaysia and Thailand was at least 20%. The study also reveals farmers with four years of primary schooling had higher crop yield than those had never been to school (Psacharopoulos and Woodhall, 1985).

Datt and Ravallion (1996, cited in Ashley and Maxwell, 2001) point that the increasing of the productivity of agriculture or yields has potential to lift large number of poor out of poverty in some developing countries. Moreover, they explained that the rural area growth positively affects the urban poverty. The Indian case is good evidence for this, rural growth reduced poverty not only in rural but also in urban areas.

Thus, as poverty is rural phenomena and the poor depend on small-scale farming, by ignoring to educate rural poor, poverty reduction and rural development can't be realized. Therefore, an investment in rural education, besides others investments, is essential to achieve rural development and a nation economic growth as a whole. Considering this (FAO and UNESCO, 2006), MDGs places high emphasis on basic education-putting an extra emphasis on two of the EFA goals (Universal Education and gender equality by 2015).

BASIC EDUCATION

It refers to the acquisition of knowledge and know-how in complementary fields (food, nutrition, hygiene, health, family planning, etc). The discussion on education in rural development includes various form of formal and non-formal education, including adult literacy program (FAO and UNESCO-IIEP, 2003).

To achieve EFA/MDGs, many developing countries are devoted to improve access to basic education and some countries showed dramatic growth in expanding. However, to drive full potential contribution of basic education to developmental goals as intended, some

critical issues need to be considered seriously. If they are not addressed, development problems, particularly in the rural area, will perpetuate and get worsen.

Issues in basic education to rural development

Access and equity

Access to education: As Acker and Gasperini (2008), one of the factor that has been considered as a key in achieving poverty eradication and sustainable development is increasing access of improved quality basic education for all (children, adults and youths) through paying attention to the poor and member of disadvantaged groups.

Failure to provide education to the majorities (about 75% of the world poor living in rural areas) is injustice and it will not be possible to achieve reduction and elimination of poverty. Rural area should deserve access of improved quality basic education. Access to education by all age and disadvantaged groups in rural areas has to be priority as it enables to address the gross inequalities that marginalize rural people. But a large proportion of the world's rural population has little or no access to basic education (FAO and UNESCO, 2003), particularly in low-income countries, opportunities for basic education is generally inadequate. A very large proportion of illiterate youths and adults and millions of out-of-school children are rural (Atchoarena and Holmes, 2004).

Beyond unfair distribution and proxy problem, the existing rural schools face various social and economical obstacles that challenge regular school attendance. Some of the problems are relevance, school facilities, cost of education, discriminatory practices, poor nutrition and health (ADB, 2001).

Regardless of costly and complexity problems of access and provision of basic education to rural areas, many developing countries are committed to address these problems. They have adopted policies and strategies and tried to implement them. In their effort some positive and significant results were observed.

Between mid-1990s and 1998/99, Mali through effort of decentralizing and effectively utilizing local communities' participation and financial and technical support of donors and Non-Governmental Organizations (NGOs), able to reduce school distance walking and increase the number of schools substantially. The Indian state of Madhya Pradesh pledged to build a primary school within three months for any rural community that provided space and hired a qualified teacher. As the result, the state is able to create access to its all primary school age children. Similarly, Nigeria was able within four years to shoot enrollment including girls from 34-41% (UNESCO, 2004). As scarcity of resources is

serious and budgets are tight in most developing countries, it is obvious and safe for one to conclude that making available all the resources required for these expansions is challenging and burden to communities and governments of developing countries.

Expansion and provision of formal basic education demands high resources and capacity. Unmet vast basic learning needs in rural areas can't be satisfied through formal schooling alone. In this case, non-formal education (NFE) can play important role by complementing or even substituting the formal education system. It can be used as a key strategy and means to increase access and provide alternative to basic education to reach out-of-school-children, adults and adolescents. Regardless of having large proportion of unmet educational needs, with insufficient resource and technical capacity, many developing countries are giving priority to run the formal education system while giving low attention to the non-formal one (FAO and UNESCO, 2006; ADB, 2001).

Only few NFE programs are organized by governments and largely they are leave to be run by community, local governments/authorities or NGOs whose involvement is insufficient and not more than small-scale activities (Atchoarena and Gasperini, 2003). Thus, NFE failed to expand to reach and benefit large proportion of rural communities.

Equity: Access to educational opportunity is very important in order to create more equitable society. Education is believed as closely interrelated with economic, social, cultural and demographic changes. Hutmacher *et al.* (2001) explained that, if educational opportunity is unfair within population segments, it may perpetuate or result in divisions based on gender, status, socio-economic role. This may lead to more inequitable socioeconomic development and more political instability (Ashley and Maxwell, 2001).

Maintaining equity in basic education not only addresses basic human rights to which everyone is entitled but also contributes to the equitable distribution of human capital which is important for broad-based growth and poverty reduction.

Despite of this fact, the rural-urban knowledge and education gap is widening for the fact that very large proportion (82%) of illiterates youths and adults and millions of out-of-school children are living in rural areas (UNESCO, 2004). Also, the opportunities that rural people have to access and complete basic education in low-income countries is still much lower than in better served urban areas.

Studies in Schultz (1998, in ADB, 2001) find a strong link between female schooling and later investment in

children's education, household health and nutrition, sanitation and other outcomes. Such findings suggest that the status and education level of females can exert strong intergenerational effects which are crucial for reducing poverty. However, girls constitute very large proportion of millions of out-of-school rural children and majority of rural illiterate are women with few and insufficient marketable skills (Atchoarena and Holmes, 2004).

On the top of this, in many low-income countries, remote rural area populations and nomadic peoples are neglected or under-served by the school system. The other segment, especially in rural areas, children and adults with disabilities are ignored and their learning needs are not met well or at all (FAO and UNESCO, 2003). It is apparent that equity in access to schooling remains main challenge in many developing countries. Of course some are achieving good results. For example, China, home of 1.3 billion people with more than 60% of them living in rural areas, has been able to reach and improve education in disadvantage zones. This was done through paying high emphasis and commitment in allocating resources towards the rural education and introduction of technology that links rural-urban school system. Also, Cuba has been able to eliminate significant difference in academic achievement between rural, children living in isolated areas and urban areas (UNESCO, 2004).

Quality and relevancy: Broad-based education of good quality is among the most powerful instruments known to reduce poverty and inequality. Hanushek and Kimko (in hanushek and Wößmann, 2007) Jamison *et al.* (2006) both point out that quality of education has positive effect on the economic output and growth.

The earlier and the recent studies indicate the impact of quality education-measured by the cognitive skills acquired-has statistically and economically positive effect on individual earnings, on the distribution of income and on economic growth which is much stronger within developing countries (Hanushek and Wößmann, 2007). In addition to this, Hanushek (2003, cited in Woodhall, 2004) has disclosed the economic effect of efficient schooling is much greater than the benefits of inefficient schooling.

Since, the linkage between education and economic performances is widely acknowledged to be positive; poor quality has been recognized as discouraging the efforts to use education as effective lever of economic growth and development. Simply letting learners to have access to attend school is not sufficient to make a difference in the lives of learners (ADB, 2003). Inadequate degree of mastery of core skills and knowledge implies inferior quality of education which is not sufficient to drive the benefits of education as expected.

The implication of these is that, since what makes matter is what is in one's head, high emphasis should be placed on quality rather than quantity.

The quality of education in developing countries is much worse (Hanushek and Wößmann, 2007) and that of rural areas not only lags behind that of urban areas, but also its quality remains more critical (Atchoarena and Gasperini, 2003). Similarly, according to the survey of 41 countries, almost half of the countries showed rural-urban gap is high (above 20%) (UNESCO, 2004).

Even though quality is influenced by many factors, the linkage of quality and relevance (curriculum and instructional language) are a crucial in rural areas. Taylor and Mulhall (2001, IIEP/UNESCO, 2002), the learning environments of school children (school, home and wider community) need to be drawn together and integrated in the learning process. Contextualized learning requires directly relating the content of curriculum, methods and materials associated with it to the experience and environment of learners. Strengthening the linkage and maximizing the interfaces of these learning environments make learning contextualize and more effective otherwise learning become out-of learner's environments and learning objectives will not be achieved as desired.

Many developing countries not only continue their efforts to expand coverage and improve quality, but also tried to adapt schools to the rural environment.

The experiences of Thailand, making the curriculum decentralized and flexible that allows the local needs to share 40% of the curriculum content (IIEP/UNESCO, 2002) is one of a good practice. If this strategy is successfully integrated utilizing the local needs as intended and also related with appropriate methods of delivers that take into account the learning environment, the learning outcome will be much better. The other lesson is that of Argentina. It was able greatly improve the relevance and quality of education in the poor rural areas by combining specific learning materials of rural school with national content along with giving training to the teachers on it (UNESCO, 2004). To improve students' achievement and quality of education, also Brazil, by providing incentives as monthly stipend, able 10 million students to keep and stay attending regularly school.

However, many Sub-Saharan Africans' (SSA) curricula are not combining national contents with local contents, taking into account the local context, customs, livelihoods and rural development activities. Beyond this, learning materials are inadequately supplied and often not available to rural people. The curriculum tends to be too academic, theoretical and examination oriented than practical (FAO and UNESCO, 2006).

Despite inequitable distribution (ADB, 2001), the rural schools have low facilities and majority of them

don't offer all primary grades instruction. In addition to this, because of socio-economic factors, regular attendance and learning achievement is low which is likely to lead to grade repetition or dropout. As we have seen earlier, in rural areas, these challenges compounded with low quality education, lack of school-based skill training and non-formal education.

It is likely that because of relevance and quality issues along with other factors, in rural areas of developing countries, there is high dropout and insufficient mastery of basic skills that required for daily use and further development. It is clear; this ignores the study finding that reveals educational quality has a strong impact on individual earnings as well as has robust influence on economic growth (Hanushek and Wößmann, 2007).

Basic education alone is not enough: Even though high emphasis and priority is placed on expanding access to basic education, it is not the only essential factor, in moving towards poverty reduction and sustainable development.

When education is complemented with other complements it will be more productive and its contribution to growth is stronger. As the view of Shultz (1964, in Psacharopoulos and Woodhall, 1985) education would be become effective in changing, in modernizing environment than in the traditional one, the study carried out strongly support his hypothesis. For farmer with four years of education, study has shown mean increase in output of 1.3% in traditional conditions but 9.5% in modern condition (Jamison and Lau, 1982).

Each stage of agricultural technology level requires different minimum level of education. The traditional stage requires little or no formal education, but simple modern input such as utilization of fertilizer often requires at least literacy and innumeracy (Psacharopoulos and Woodhall, 1985). Thus, education is appearing to be prerequisite in the non-traditional environment and its effect is substantially greater in the modern environment than traditional one. It is clear; the research indicates the fact that the ability to adopt technologies whether it is simple or complex is linked to education. Beyond this, it indicates that optimization of land productivity requires skill training beyond basic education.

The returns to basic education to be high in agricultural economy, it appears that school leavers must at least have access to improved technologies. Of course, availability of access to land and other productive assets are also important. More over, in rural contexts and rural development, one of the fundamental purposes of the basic education is to serve as a base for further skill

training (formal or non-formal) and extension that contribute to effective utilization of agricultural technologies and to prepare them for off-farm employment, of course, some of them for general education.

In response to the serious need to increase productivity, ensure food security, poverty reduction, response to the possible impact of globalization on rural labor markets and in environmental protection, rural skills development is necessary (ILO, 2005). As Ashley and Maxwell (2001), poverty reduction, in agriculture-led, mainly depends on the efficiency of small farms productivity. For success in rural areas, a variety of formal and non-formal skill training should be provided (Acker and Gasperini, 2008). With out utilizing the potential of the on/non-farm sector, effective poverty reduction is not easy to think. Thus, training intervention that can enable the poor to participate in more productive aspects of the rural on/non-farm economy is needed.

Therefore, the implication of rural skill development is changing the traditional ways of farming as well as off-farm employment generation that can contributes to the individual and social capital creation. To change traditional labor intensive farming that yields insufficient produce to efficient one and to use the surplus labor (to be saved in on-farm activities) in non-farm activities at least it requires preparing individuals with necessary education and/or skill training.

Even if countries are running to achieve rapid and high expansion of access and coverage in basic education, the opportunity of pupils, who managed to complete primary cycle in rural areas, to continue to receive skill training or to pursuit the further high level academic or skill is limited than urban (ADB, 2001). It is evident, there is failure in taking into account the fact that demonstrates successful transition from subsistence agriculture or basic industry to next developmental level, investment in quality basic education together with appropriate skill training is prerequisite for continuing economic growth (ADB, 2003).

Over whole, the problem of high dropout, poor quality and irrelevant curriculum, failure to have livelihood skill training that improve the productivity, may push young to exit rural areas. These exacerbated with some parents' wish to their children to have better employment and life in urban areas, in addition to the adults, the emigration of insufficiently schooled or unskilled young force to urban is increasing, which is often the case in SSA (FAO and UNESCO, 2006). This can be good implication to the fact that the rural areas may lose their young workers and remain with less productive very young and very old ones while urban areas, because of the immigrant, face more socio-economic problems.

ROLE OF HIGHER EDUCATION INSTITUTIONS (HEI)

The institutions of higher education are important potentials for social and economic development. Beyond producing high level of manpower required for the economy, particularly for various levels of rural development, they can play major role in their non-teaching aspects of research and extension which is critically needed in improving and solving problems in rural development (The World Bank, 2000; Bloom *et al.*, 2005).

The attention of universities, Ping (1998, in FAO and UNESCO, 2003), could not only be on research, instruction and consultation but also on the quality of materials, teaching methodology and on assessment of results in the education of rural development that encompasses basic, secondary, vocational and adult education. FAO/UNESCO/IIEP (2006, in Acker and Gasperini, 2008), also point out that HEI can play a key role in the aspects of training the required personnel and extension staff, assisting with the development of curriculum and helping in monitoring and evaluation of education of rural areas. Further, particularly Agricultural Higher Institutions (AHI) can directly involve in improving the knowledge, skills for off-farm employment and life long learning opportunities.

Thus, universities besides missions of research and teaching are expected to play role of support in the development and improvement of education at all levels, particularly must contribute significantly to the pursuit of EFA goals (Atchoarena and Holmes, 2004). The experience of some countries' institution response to this view positively. For instance, Japanese national universities, Niigata University Faculty of Agriculture, beyond research and teaching, it offers adult education programs that includes extension programs to its surrounding farmers (Kato, 2003 in Atchoarena and Holmes, 2004). There close contact also enable them to create fertile condition to better understanding and address the local problems of the community. In China, agricultural vocational schools besides regular training they contribute to the rural development by providing trainings to the adult farmers in their locality. Moreover, including AHI, they involved in developing new skills for farming and providing training for farmers and they are promoting extension in agriculture (IIEP/UNESCO, 2002).

Through creating linkage and reaching surrounding community and institution, AHI can act as a catalyst and contribute to the economic and social development of rural community. However, in contrary, higher institution including agricultural universities, mostly involved in

research and teaching activities which contribute to the national level development (Atchoarena and Holmes, 2004).

The finding in the above discussion reflects that the efforts to create access to basic education and improving its coverage are encouraging. But, in many developing countries, not only access to basic education in rural areas is inequitable among different groups, but also the quality and relevance are additional problems. The effort to link basic education with relevant skill training, which is highly important to realize rural developing in developing countries, is given less attention. The potential contribution of HEI is overlooked as well.

In planning and provision, if these basic weaknesses are given serious attention and followed by proper practical measure to resolve them, the potential and the benefits to be obtained from basic education can be maximized and poor can be helped to get out of poverty cycle as intended as well as education can really contribute to the sustainable socioeconomic development of a nation.

CONCLUSION

In fighting poverty, which is rural phenomena and to promote sustainable development high emphasis is placed on education both nationally and internationally. Studies indicated that productivity is affected by level of education and quality factor as well.

Even though many developing countries are putting their effort to improve access, equitability and quality of basic education in rural areas, still its distribution is inequitable with low quality and relevance of basic education in many rural areas are problematic.

Very large proportion of out-of-school children and illiterates are mainly girls and women live in rural areas. Moreover, the shares of disadvantaged groups who are denied access to basic education are not simple. Quantity and quality are resource competent. Developing countries, regardless of resources and capacity limitation, they are expanding access at the expense of quality. Beyond commitment, improving access, equity and quality as well as provision of skill training requires much resources and technical capacity which developing countries cannot afford alone. In addition to this, curricula are urban biased. That is, quality and relevance in many rural areas are critical problems.

Even if basic education is also to prepare learners and to create fertile ground for future learning and/or training, in most of the rural areas, both who completed or dropout from basic education remained with less access to continue further general education or/and skill training

that prepare them for on/off-farm employment. As the result, potential productive advantage to be obtained from training them lost.

In this regard, not only the opportunity to make learner more efficient as well as have improved on-farm income missed but also good opportunity of saving extra labor from on-farm activities and to use it on off-farm activities, that could be a means of additional alternative income generation, is gone. On the top of this, because of lack of access to basic education and skill training, very large disadvantaged groups failed to be more productive in on/off-farm activities. The extra wealth that possibly could be created by them because of education and training, which could be synergy to the economic development, is missed.

Beyond supplying manpower required, the role higher institution to play in rural development is high. But they failed to pay more attention and create close linkage with rural local development activities, which could create good opportunity to better understanding of the problems and to support rural development through non-teaching aspects such as knowledge generation and dissemination. Most of them are involved in teaching and research which are not immediately related to the rural development, as the result they are not fully utilized in the implementation of rural development in developing countries.

Poor quality education and irrelevance curriculum may result in high dropout and repetition. Absence of skill training relevant to rural livelihood and complementary inputs together with other factors push learners to look for other better option in urban areas. In this context, it is likely that the mobility of unskilled young from rural to urban areas will increase which might be serious potential for socio-economic chaos in urban areas and for nation at large. Moreover, in this situation, it is apparent that achieving MDGs as intended within coming seven years particularly in developing countries is not feasible.

Policy or decision makers, to optimize the economic benefit of education in rural development, should improve access and equitability of basic education in rural areas. Besides this, primarily, maintaining its quality is important. Secondly, it should be supplemented with provision of productive skill training in on/off-farm activities that are relevant to the rural context. Thirdly, at least those who received basic education should apply complementary inputs in their production. The last but not least, utilizes the potential contribution of higher institutions. As these cannot be achieved by developing countries alone, donors and NGO's farther strengthening their support is necessary. Otherwise, basic education alone will not be sufficient or guarantee to improve productivity and break poverty as intended.

REFERENCES

- Acker, D. and L. Gasperini, 2008. Education for Rural People: What have we learned? Unpublished.
- ADB, 2001. Education and National Development in Asia: Trends, issues, policies and Strategies. The Asian Development Bank, Philippines.
- ADB, 2003. Our framework policies and strategies: Education. Published by Asian Development Bank. In: Ashley, C. and S. Maxwell (Eds.) (2001). Rethinking Rural Development. Development Policy Review Blackwell publishers, oxford, U.K.
- Atchoarena D. and L. Gasperini, 2003. Education for rural development: towards new policy responses. FAO and UNESCO, Italy.
- Atchoarena, D. and K. Holmes, 2004. The Role of Agricultural Colleges and Universities in Rural: Development and Lifelong Learning in Asia. Asian J. Agric. Dev., 2: 1-2
- Baun, W.C. and S.M. Tolbert, 1985. Investing in Development: Lessons of World Bank Experience, World Bank.
- Bloom, D., D. Canning and K. Chan, 2005. Higher Education and Economic Development in Africa. Harvard University.
- Brimley, V. and R.R. Garfield, 2002. Financing Education in climate of Change. Allyn and Bacon, USA
- Cohn, E., 1979. The Economics of Education. Ballinger Publishing Company, U.S.A.
- FAO and Unesco, 2003. Education for rural development: towards new policy responses. FAO, Italy.
- FAO and Unesco, 2006. Education for rural people in Africa. FAO, Rome.
- Hanushek, E.A. and L. Wobmann, 2007. The Role of Education quality in Economic growth. Research Working paper. World Bank.
- Hanushek, E.A. and L. Wößmann, 2007. Education Quality and Economic Growth, The World Bank Washington D.C., U.S.A.
- Hope, K.R., 2004. The poverty dilemma in Africa: Toward policies for including the poor. Published by sage publications.
- Hutmacher, W., 2001. Douglas Cochrane and Norberto Bottani, 2001. In Pursuit of Equity in Education: Using International Indicators to Compare Equity Policies. Kluwer Academic Publishers, Netherlands.
- IIEP/Unesco, 2002. Education for rural development in Asia: Experiences and policy lessons. UNESCO, Paris.
- ILO, 2005. Skills Development for Rural People: A Renewed Challenge, Working Group for International Co-operation in Skills Development, Geneva.

- Jamison, E.A., D.T. Jamison and E.A. Hanushek, 2006. The effects of Education Quality on Income Growth and Mortality decline. National Bureau of Economic Research, Cambridge.
- Jamson, D.T. and L.J.Lau, 1982. Farmer Education and Farm Efficiency. Baltimore, Md.: Johns Hopkins University Press.
- Nwomonoh, J., 1998. Education and Development in Africa: A Cotemporary Survey. International Scholars publications, San Francisco.
- Psacharopoulos, G. and M. Woodhall, 1985. Education for development: An Analysis for Investment Choices. World Bank, Oxford university press, U.S.A.
- Unesco, 1997. Education for All Status Report. Paris.
- Unesco, 2004. Education Today. No. 9. The Newsletter of Unesco's Education Sector.
- United Nations, 1999. Press Release, HR/4445. Concluding Session of the Committee on Economic, Social and Cultural Rights, New York.
- World Bank, 2000. Higher Education in Developing Countries. Washington, D.C. U.S.A.