# JICA's Operation in Education Sector

- Present and Future -



September 2010



## **Preface**

Only five more years remain for the world to work towards achieving the Millennium Development Goals (MDGs) by 2015. Developing countries have succeeded in improving the education for their citizens in many respects, yet much remains to be done: there are still many out-of-school children in the world and the access to quality education still poses a challenge. JICA views providing quality education for all as one the most important goals of development. We will continue our commitment to education assistance, and join global initiatives to achieve the MDGs.

This paper describes the framework of JICA's operation in the education sector for the next five years. In it we share the reasons for our engagement, explain what tasks we believe need to be tackled, and offer approaches drawn from our own experiences in education to define our cooperation towards achieving the MDGs during this last phase. We hope it will aid others to understand JICA's involvement in international education assistance, and publicly reaffirm our commitment to attain the MDGs by 2015.

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## 1. Objectives of JICA's cooperation in the education sector

Education is the cornerstone of any kind of development. The acquisition of knowledge and skills through education enables people to open up and improve their prospects in life. People's enhancement of their capabilities as a whole promotes poverty reduction, economic growth, and scientific and technological development. In addition, the attainment of stability and peace in the world requires the promotion of mutual understanding beyond religious and racial boundaries. Education plays an important role in this context.

Developing countries, however, face many problems in the quantity and quality of their education. The net enrolment rate for primary education is 89% in developing countries on average. Although there are 36 million fewer out-of-school children in the world today than in 1999, they still number as many as 69 million. In the poorest countries, even if children can enter a primary school, one-third of them cannot graduate. In addition, although demand for secondary education has been increasing because of the expansion of primary education, the enrolment rate for secondary education has remained low. Moreover, the development of high-skilled human resources to lead industrial development in developing countries is insufficient. These problems in education are the key factors that hinder the growth of developing countries.

Providing support to offer quality education to as many people as possible in developing countries is the responsibility of the international community, as specified in Education for All (EFA)<sup>1</sup> and the Millennium Development Goals (MDGs)<sup>2</sup>. Good education serves people's empowerment and contributes to the "human security", which is advocated by Japan. JICA will extend its support in the education sector by recognizing its importance from the following viewpoints:

## (1) Education as a basic human right

Education – basic education<sup>3</sup> in particular – provides basic knowledge and skills that are essential for people's lives, such as "reading, writing, and calculation." It is a basic right that should be equally enjoyed by all people. Only if people satisfy their need for basic learning can they increase the range of choices in their lives and develop their independence. JICA will endeavor to further expand education opportunities in developing countries.

<sup>&</sup>lt;sup>1</sup> "Education for All (EFA)" was advocated at the World Conference on EFA in 1990, where it was confirmed that education is a basic right of all people and common goals were set up to expand basic education. At the World Education Forum held in 2000, which was a follow-up to the EFA meeting, it was agreed, that six goals should be achieved by 2015, including: the guarantee to all children of access to and completion of high-quality and free-of-charge compulsory primary education, an increase in the adult literacy rate by 50%, and the elimination of gender disparities in education.

<sup>&</sup>lt;sup>2</sup> MDGs were agreed at the UN Millennium Summit in 2000 and consist of 8 goals and 18 targets for poverty reduction. The goals include the realization of universal primary education by 2015 and the elimination of gender disparities in all levels of education.

Education that provides basic knowledge and skills that are necessary for each person to live is generally called "basic education." Basic education includes early childhood development, primary and secondary education (formal education), and non-formal education that provides opportunities for learning reading and basic knowledge and skills necessary for a wide range of people, including adults, to live and improve their livelihoods.

## (2) Contribution to social and economic development

Providing education to individuals for their empowerment contributes to social and economic growth. For example, the provision of more educational opportunities to women facilitates their advancement in society and plays a significant role in improving problems, such as those of high birth rates and infant mortality rates or HIV/AIDS. In addition, reinforcement of human capital through not only basic education but also technical and vocational education and training (TVET) and higher education greatly facilitates the development of industries and science and technology that lead to economic growth.

In addition, the recent progress of globalization and knowledge societies has further increased the necessity for upgrading and improving education. The base for economic development has been shifting from natural resources and industries to knowledge itself. To keep up with these global changes, countries must develop high-skill human resources that can create knowledge by themselves, think flexibly and use knowledge effectively, and solve problems that they face. JICA will provide assistance based on these demands of today's world to support social and economic development.

## (3) Promotion of mutual understanding for a symbiotic multicultural society

If people acquire wide knowledge, various skills, and deep cultural awareness, they can deepen their understanding of circumstances, including themselves and the world, develop a sense of values and mutual understanding with others who are from different cultures, and contribute to the creation of a peaceful society that respects symbiosis. In today's world, where conflicts frequently occur, this role of education has become more and more important. JICA will extend its operations and renew its recognition of education's significant role in promoting mutual understanding and realizing a symbiotic multicultural society.

JICA believes that education is at the core of all development issues. This is rooted in Japan's own experience. Recognizing the importance of education as the base for its development, Japan advanced scientific and technological development and industrial growth by enhancing people's capacity through education – especially during the process of modernization from the mid-19th century. Through that process, Japan also created an equitable society by ensuring the equal right for all people to receive education. Based on Japan's own experiences, JICA will support developing countries to strengthen educational systems and institutions, develop human resources, and extend human networks in order to promote social and economic development.

## 2. Priorities for JICA's support to the education sector

While JICA will adjust the priority of its assistance among the subsectors (early childhood development, primary education, secondary education, higher education, TVET, or non-formal education) depending on the issues and challenges of individual countries, JICA gives a foremost priority to primary, secondary and higher education. Moreover, JICA pays

full attention to the different needs of marginalized children in order to realize inclusive education<sup>4</sup>, since girls, ethnic minorities and disabled children tend to have few opportunities to gain quality education.

#### (1) Basic education

Priority continues to be given to primary and secondary education, which is at the core of basic education.

There are still many children in the world who cannot go to school, or cannot complete the primary cycle of schooling. This is due to many causes. The main direct cause for blocking their access to schools is a shortage of school facilities. Moreover, there are many cases where, even if children can go to school, they cannot achieve the minimum standard of learning due to the poor quality of education. This results in many repeating the same grade or dropping out. Low-quality education is caused by a shortage of textbooks and other educational materials, a shortage and/or poor quality of teachers, and inadequate curriculum design. There are many issues behind the low quality of teachers, which need to be addressed. Many teachers lack subject knowledge and practical skills to deliver lessons due to their insufficient education and training. In addition, low social recognition for teaching professions and low economic incentives often decrease teachers' motivation.

These issues are caused by insufficient budget allocation to the education sector and weak education administration. In general, education is one sector that needs large public funds, particularly for teachers' salaries. However, many developing countries face tight fiscal situations and have limited public funds for education. Also, governments may not have enough administrative capacity to fulfill their roles of delivering education services.

On the other hand, the social and economic environments for school-age children and their parents affect school attendance. Such problems as poverty, conflict, child labor, and infectious diseases impede children's school attendance. Schooling itself sometimes imposes heavy financial burdens on families, such as through educational expenses to be paid as the school maintenance fees, PTA membership fees, etc., and other opportunity costs. Still, poverty prevents children from going to school. In addition, social norms and cultural values sometimes hinder girls' education.

To cope with these problems, JICA, based on its past experiences, will focus on the strengthening of teachers' capacities through training, <sup>6</sup> the establishment of a

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<sup>&</sup>lt;sup>4</sup> Although there is no uniform definition, inclusive education can be defined as education that is provided according to each child's educational needs without isolating disabled children or ethnic minority children.

<sup>&</sup>lt;sup>5</sup> The average public current expenditure per primary school student is 5,312 dollars in developed countries, while it is 130 dollars in Sub-Sahara African countries and 249 dollars in Southeast Asian countries (UNESCO (2010) EFA Global Monitoring Report).

Teachers are the most important factor for determining the quality of education. Strengthening of training for teachers (including new teachers) is essential for continuously fostering and securing highly competent teachers. From the beginning of its modern school education system, Japan recognized the importance of teachers and endeavored to build up a system to promote the continuous and step-by-step development of teachers' abilities by examining teacher training programs, qualifications and treatment of teachers, etc., from various angles. Referring to such excellent experiences in Japan, JICA has been providing cooperation in the training of instructors, teachers, and principals, as well as the development of teaching guides and other

community-participatory school management system, <sup>7</sup> the construction of school facilities by local contractors, and the capacity development of educational administrators in central and local governments, which is essential for sustaining the effect produced by these other efforts.

Because these problems are especially serious in Sub-Saharan African countries, JICA will focus on comprehensive support for the following measures that are based on the TICAD IV Yokohama Action Plan<sup>8</sup>: (1) expansion of access (provision of educational opportunities to about 400,000 children through construction of 1,000 primary and secondary schools with 5,500 classrooms); (2) improvement of the quality of education (provision of training to 100,000 science and mathematics teachers); and (3) improvement of school management (expansion of School for All project, a community-participatory model for improving school management, to 10,000 schools).

### [Case] Project on Support to Improvement of School Management Through Community Participation in Niger (Schools for All project)

In Niger, although a "school management committee" consisting of residents, parents, and school representatives was planned to be established for each primary school, there were many schools where the committee did not function well and effective and efficient management could not be carried out. To cope with this problem, JICA has cooperated with the Niger Government since 2004 to activate the school management committees and improve the educational environment. At present, about 10,000 primary schools with 1,550,000 students have formulated and carried out action plans for their improvement under



the leadership of the school management committees. School buildings have been expanded and textbooks and other educational materials have been purchased with the funds and labor provided by the communities. Moreover, the home learning environment has been improved because of an increase in residents' awareness. In addition, Senegal, Mali, and Burkina Faso – countries that have similar problems in school management – have begun similar projects to improve their educational environment.

Although basic education has expanded in other regions, JICA will provide support to countries that still have problems in education quality, such as a low learning achievement rate, a low completion rate, and a gender disparity. Moreover, in Afghanistan and other countries where the improvement of the adult literacy rate has become a challenge after prolonged civil war, JICA will also give support in non-formal education by trying to cooperate with NGOs and international organizations that have rich knowledge and experience in this sector.

educational materials and the introduction of lesson study.

<sup>&</sup>lt;sup>7</sup> The establishment of a school management system, with the participation of local residents through the creation of a school management committee, increases the recognition of the importance of education, promotes the use of local resources, and consequently plays an important role in improving the enrolment rate and the completion rate and correcting the gender gap. In addition, the establishment of the system contributes to the community's independent development through the improvement of people's ability to solve various community problems while contributing to multicultural symbiosis through the promotion of mutual understanding among people of the community.

This roadmap was prepared to show the concrete efforts and support measures of related countries and agencies, and was based on the "Yokoyama Declaration" made at the fourth meeting of TICAD (Tokyo International Conference on African Development) held in Yokohama in 2008.

## [Case] Broadening Regional Initiative for Developing Girls' Education (BRIDGE) Project in Yemen

Among all countries of the world, Yemen has one of the largest gender gaps in access to basic education. The net enrolment rate for primary education is 85% for men and 65% for women. The adult literacy rate is 76% for men, while it is only 39% for women. In this situation, JICA carried out the Women's Educational Improvement Project in the Province of Taiz for three and a half years since June 2005. Under this project, various activities were carried out, including a campaign to promote girls' school attendance under the teachings of Islam, mothers' literacy and sewing classes for the purpose of closing the distance



between communities and schools, and the improvement of principals' and teachers' school management capability. As a result, the number of girls and boys going to the schools covered by the project increased by 50% and 30%, respectively. In addition, the percentage of principals who answered "boys and girls have an equal right to receive education" dramatically increased from only 9.4% at the beginning of the cooperation to 96.6% at the end of the project.

To foster researchers and high-level human resources who can lead innovations in science and technology, it is important to improve science and mathematics education at the primary and secondary levels and expand the human resource base with sufficient scientific knowledge and up-to-date technical skills. Because Japan has a comparative advantage in this sector, the expectation for Japan's assistance is high. In response to this enormous demand, JICA will intensify its support to science and mathematics education.

## [Case] Strengthening of Mathematics and Science Education in Western, Eastern, Central and Southern Africa (SMASE-WECSA) Network

In Africa, although it is urgently required to develop human resources equipped with the scientific knowledge and skills necessary for industrial development, people's abilities in mathematics and science – the basis for the development of such human resources – are low. One of the causes is the lack of teaching skills. To cope with this, in the decade from 1998, JICA and the Kenyan Ministry of Education carried out the Strengthening of Mathematics and Science in Secondary Education Project and provided training to about 20,000 science and mathematics teachers at secondary schools. As a result, the way teachers organize science and



mathematics classes was greatly improved and students' interest in the subjects grew to a great degree. This project confirmed that the improvement in teachers' skills and knowledge have the effect of improving students' academic achievements. In response to increasing demand for this approach, the Strengthening of Mathematics and Science Education in Western, Eastern, Central and Southern Africa (SMASE-WECSA) Network was established in 2001 (34 countries and 1 region participated in the network as of August 2010). Under SMASE-WECSA, a total of 1,208 people from 28 countries participated in training in Kenya, and 16 countries received technical assistance from Kenyan trainers from 2003 to 2009.

In addition, JICA has recently extended cooperation to vocational training in post-conflict countries to support improvements in the livelihoods of demobilized

soldiers, internally displaced persons, and conflict-affected women. Such cooperation is significant in that it not only provides vocational techniques and skills, but it also contributes to enhancing the awareness of peace. Therefore, JICA will continue its support in this area in collaboration with other development partners while increasing its timely responsiveness.

## (2) Higher education

In recent years, due to improvements in basic education and the development of knowledge-based societies, demand for higher education has been increasing not only in developed countries but also in developing countries. Responding to this demand, the number of higher education students has been increasing in developing countries. Higher education in developing countries, however, still faces many challenges: there is a shortage of well-qualified teachers, necessary facilities and equipment for education and research. Moreover, there is a challenge to strengthen not only the management of individual universities but also of the higher education system as a whole and tackling the issue of quality assurance and evaluation.

JICA will work further with Japanese universities for the improvement of education in developing countries and the research capabilities of their higher education institutions.

To use limited resources effectively, JICA will mainly give support to core universities that should, on account of being the leading universities, lead the higher education sector of their respective countries and regions. This support should aim to improve their education and research capabilities through the improvement of teacher quality; facilities, research materials and equipment; the strengthening of university management systems; the promotion of industry-university-community cooperation; and the construction of university networks.

Support will be given mainly to engineering, agriculture, and public health sectors. In particular, due to the fact that the high level of education and research in engineering has made Japan a world leader in science and technology, JICA will continue to respond positively to demands in the engineering sector.

In the Asian region, JICA will continue to focus support to the ASEAN University Network/Southeast Asia Engineering Education Development Network (AUN/SEED-Net) and provide support to individual leading universities, when necessary. Moreover, JICA will continue to support scholarship programs in Japan.

## [Case] ASEAN University Network/Southeast Asia Engineering Education Development Network (AUN/SEED-Net) Project

After the Asian currency crisis in 1997, the development of human resources in engineering to help support sustainable economic and social development was recognized as an important challenge. Since 2001, JICA has provided cooperation to enhance the educational and research capacities of universities in ASEAN countries through the creation of a network among 19 major engineering universities in 10 ASEAN countries and 11 supporting universities in Japan. In the ASEAN countries, JICA has



taken efforts to promote cooperation among universities in order to solve common issues in the ASEAN region—such as disaster mitigation and climate change—through the upgrading and exchange of academic staff, collaborative research, and the establishment of regional academic societies.

In the Middle East and African region, building on its experiences and activities in the engineering sector, JICA will continue to mainly provide support to the Egypt-Japan University of Science and Technology (E-JUST), which opened in February 2010.

#### [Case] Egypt-Japan University of Science and Technology (E-JUST) Project

In Egypt, due to an increase in the young population and generous tuition exemptions for all students, the number of students per university is too large (for example, Cairo University has 260,000 students) to provide high-quality education in the engineering sector. To address this difficulty, the Egyptian Government and JICA founded E-JUST to provide a first-class scientific and engineering education throughout the Middle East and African regions. Its key principles are to be "a university that has a small



number of students, focuses on research, and centers on the graduate schools" and fostering "education and research that place importance on Japanese-style practical and applied skills." When E-JUST was founded as a national university, the Egyptian Government had started to built the campus and employed academic staff, while JICA gave advice in managing the university and improved the quality of education and research through the dispatch of academic and administrative staff from supporting universities in Japan (12 universities, including Waseda University, Kyoto University, Kyushu University, and the Tokyo Institute of Technology took part).

In addition, JICA will give support to the leading technical colleges of countries to train and develop human resources that can respond to the constantly changing needs of industries for different technology and skills. Assistance will be extended for reorganizing courses, improving curriculums, and training high-quality teachers.

#### [Case] Project for Strengthening the Capacity of Tumba College of Technology in Rwanda

This project contributes to the development of human resources in science and technology in Rwanda through the enhancement of the capabilities of all three departments (IT, alternative energy, and electronics/telecommunications) of the Tumba College of Technology (TCT), which has courses for the training of secondary education graduates in order for them to become advanced technicians. TCT was founded in 2007 through the rehabilitation of facilities at a technical high school that was built by Japan's ODA before the civil war. To replicate such experiences in Asia under similar projects,



JICA has mobilized not only Japanese experts but also experts from Indonesia and Nepal.

## 3. JICA's guiding principles in its education programs

Development needs in education are changing and differ depending on a country's development stage. JICA's response to these different demands will be based on the following principles:

## (1) Supporting policy making reflecting on-the-ground knowledge

JICA has a rich experience in developing practical models for educational improvement at schools and institutions where the learning actually takes place, by sending experts and volunteers to the sites.

In recent years, developing policy frameworks for educational development and filling financial gaps to facilitate implementation have been the key issues, particularly in the basic education sector, through the Fast Track Initiative (FTI), etc. <sup>9</sup> However, in addition to policy framework development and resource allocation, it is necessary to develop human resources, systems and institutions for the implementation of individual policy items in accordance with the actual situation on the ground, which can eventually improve the process and management of educational activities. Based on this thought, JICA will continue to extend support at schools and institutions where the learning actually takes place, to make a real difference in teacher training, school-based management, etc.

Moreover, JICA will more actively engage in the planning and implementation process of the educational development plans of partner countries at the policy level, through sending policy advisors to the ministries of education and providing financial support, through which JICA will contribute to reflecting on-the-ground knowledge in the policies. Nation-wide application of a model that is developed by technical cooperation will also be further implemented through financial assistance and collaboration with other donors.

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FTI is a global initiative whose main purpose is to close the financial gap for the realization of "achievement of universal primary education by 2015," which is included in the EFA Dakar Framework for Action and MDGs' goals. FTI was inaugurated in 2002 under the leadership of the World Bank.

# (2) Longer-term engagement in alignment with partner countries' development plans

In planning and implementing its activities in the education sector, JICA clarifies the position of the activities in the framework of the educational development plan of the partner country and shares related information with other development partners. Alignment with partner countries' development plans and coordination with other donors are particularly important for the basic education sector, where donor coordination is most active through the Sector-wide Approach (SWAp)<sup>10</sup>, FTI, etc. In addition, JICA will extend support from mid- and long-term perspectives, as it takes a long time for support in the education sector to actually yield outputs.

## (3) Promotion of network-type cooperation and exchange

JICA will further promote network-type cooperation, whereby Japan serves as a facilitator to utilize each country's own experience, knowledge and outputs from past cooperation to solve common problems that the countries and regions face (regionalization of cooperation). In the basic education sector, JICA will use the SMASE-WECSA network to create a platform where countries can share their experiences in, and knowledge of, mathematics and science education.

In the higher education sector, JICA will use AUN/SEED-Net to promote human exchange and research collaboration among the leading higher education institutions of engineering in ASEAN countries and Japan, through which human resources are developed and the region's ability to cope with common issues, such as disaster mitigation and climate change, is further enhanced.

## (4) Results-oriented project design, implementation, and evaluation

The most challenging aspect of educational cooperation is how to define and evaluate the results. JICA will make efforts to design and implement result-oriented projects more than before by, for example, introducing a rigorous impact evaluation. In higher education and TVET, JICA will design and implement projects while also focusing on external efficiency, which is measured by how many graduates can get jobs, how many research papers are published, etc. JICA will also improve evaluation methods by strengthening baseline and end-line surveys.

<sup>&</sup>lt;sup>10</sup>SWAp is a development approach whereby, in order to solve problems such as overlapping aid efforts, ineffective use of human and financial resources for assistance and inconsistency with the recipient country's development plan, a development plan for each sector is prepared mainly by the recipient country, coordination is made between the recipient and donor countries according to the plan, and comprehensive aid is provided on the program basis. The ratio of comprehensive aid programs to all the aid programs for basic education increased from 31% in 1999-2000 to 54% in 2005-2006. The amount of financial aid for basic education was 2.16 billion dollars in 2005.



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