



Students in science class (Science and Mathematics Education Improvement Project in Senegal)



Schoolgirls in a mathematics class (The Project of Teacher Training Improvement in Science and Mathematics at the Primary Level in Burkina Faso)

Human Development

Overview of Human Development Field/Basic Education/
Higher Education, Technical and Vocational Education and Training/
Health/Social Security

Overview of Human Development Field

In the human development field, JICA provides technical cooperation in three sectors: (1) education (basic education, higher education, technical and vocational education and training); (2) social security (social insurance and welfare, support for persons with disabilities, labor and employment); and (3) health (infectious disease control, maternal and child health, reproductive health, health systems reconstruction for health, human resource development for health). These are all fundamental and important issues in human life closely related to the concept of human security. They are also related to five* of the eight Millennium Development Goals (MDGs) that were adopted by the UN as being important for the future prosperity of humankind.

In the basic education sector, JICA works to improve the quality of education mainly in science and mathematics by

improving classroom lessons and strengthening the training for pre-service or in-service teachers. JICA also places importance on cooperation for developing basic environment for education, including the enhancement of education administration and school management, as well as the participation of the community in school activities.

Higher education, technical and vocational education and training are essential for economic development, and JICA supports human development at universities and research centers, etc., to respond to the needs of the industrial world. In particular, the importance of science and technology such as information technology (IT) in developing countries has been reaffirmed recently. Under such circumstances, these countries also have expectations for Japan to support higher educational institutes

Front Line

Nepal

Improving the health of Kathmandu residents amidst rapid urbanization

Collaborating with city medical staff to create an urban nutritional improvement program

The population of Kathmandu rises each year as people continue to migrate from rural regions. These migrants leave behind their traditional diets in rural villages and are compelled to live according to urban dietary conditions. However, they lack sufficient knowledge on nutrition to adapt to the new situation, creating the onset of new lifestyle-related diseases in addition to the existing problem of malnutrition.

In light of these circumstances, the Kathmandu City Office began an urban nutritional improvement program in 2008, in addition to its nutritional improvement program that targets malnutrition. This program is the result of collaborative planning by the city's medical staff and Japan Overseas Cooperation Volunteers, and sets the objectives of raising the community's awareness on preventing lifestyle-related diseases and developing community leaders.

The program is designed so that community volunteers can take major initiatives by using easy-to-see charts to determine if one is overweight or underweight as well as nutritional guidance leaflets with abundant illustrations. These charts and leaflets, which are both created to aid

the program, can be easily used at home and are welcomed by many community volunteers.

The initiatives of community volunteers through the citywide nutritional improvement program are anticipated to spread as grass-roots activities for maintaining and increasing the health of local residents, including prevention of lifestyle-related diseases. (Nepal Office)



A health checkup in Kathmandu

that are key players in development and extension of science and technology.

In the social security sector, support for medical security and pension policy, assistance related to social welfare policy targeting elderly people and children, assistance enabling persons with disabilities to participate in social activities, and assistance related to labor and employment problems are provided in line with the needs of each country based on Japan's experience and knowledge.

In the health sector, JICA carries out activities aimed at strengthening the capacity of people as well as that of governments, municipalities, citizen organizations, and residents that are engaged in health and medical activities in developing countries, for the purpose of expanding and upgrading fair health and medical services. JICA also implements projects related to infectious disease control, such as of HIV/AIDS and malaria, which

are especially serious in Africa; promotion of maternal and child health to protect the health of women and children; improvement in vulnerable health administration systems in developing countries; and developing human resources engaged in health.

Through these activities, JICA aims to secure the existence, livelihoods, and dignity of humankind within the meaning of human security in developing countries in the human development field.

* The MDGs related to human development are: (1) achieve universal primary education; (2) promote gender equality and empowerment of women (elimination of gender disparity in education); (3) reduce child mortality; (4) improve maternal health; and (5) combat HIV/AIDS, malaria and other diseases. (The other three goals are to eradicate extreme poverty and hunger, ensure environmental sustainability, and develop a global partnership for development.)

Basic Education

In the sector of basic education, JICA provides cooperation to improve classroom lessons, enhance science and mathematics education, and train pre-service and in-service teachers in order to improve the quality of education. In addition, JICA provides assistance for improving enrollment rates and strengthening infrastructure for educational activities by constructing schools, improving school management with the participation of the community, and enhancing education administrations. JICA also works to redress educational gender disparity as well as to offer non-formal education.

Overview

Basic education, which centers on primary education that meets people's fundamental learning needs, equips individuals with the capability to handle the various issues faced within society and enables individuals to lead lives of dignity. Basic education also plays a fundamental role in poverty reduction and economic development.

Nations of the world are currently working toward realizing universal basic education. As of 2005, 688 million children were attending school. Meanwhile, there are 72 million children who cannot attend school for various reasons including the lack of a school near their homes, the need to work for their family, and inadequate classes at schools (EFA Global Monitoring Report 2008).

The international community has established the "Education for All – Dakar Framework for Action," and provides assistance

with the aim of enabling all children to attend school by 2015. Under this framework JICA provides cooperation focused on improving enrollment rates in basic education, enhancing the quality of education, and bolstering education administrations and school management.

JICA's Efforts

Improving enrollment rates

Japan has continued to address the lack of schools and classrooms by constructing primary and secondary schools through general grant aid projects and community assistance grant aid projects. However, it is also important to these efforts to promote enrollment to children who do not attend school and their parents, as well as to improve the quality of classes, in tandem.

Enhancing the quality of education

In order to teach children to read and write and to equip them with various problem-solving skills, it is important to provide them with a quality education, beyond just the opportunity to attend school. JICA helps develop the capacity of teachers, who play important roles in ensuring quality education, through assistance for improving classes, enhancing science and mathematics education, and training pre-service and in-service teachers. Primary and secondary school classes in developing countries commonly feature a one-way lecture with the teacher writing on the blackboard and the students merely listening. To improve this

JICA Support Program for Strengthening Primary Teacher Training on Science and Mathematics under Component 2 of PEDPII in Bangladesh

Classes at elementary schools in Bangladesh were commonly focused on cramming knowledge and methodologies, and there were calls to improve the quality of classes.

For this reason, JICA developed a "teaching package" for this project consisting of teaching plans and materials. Study sessions and joint research are held at local teacher training institutes and schools participated with the aim being to improve the quality of science and mathematics classes. Improvements can be seen, including more opportunities for children to think deeply about the problems given to them and to discover various facts in the process.

The "teaching package" developed through this project has been spread to training institutes for primary school teachers through training and monitoring activities. This package will be distributed to all Bangladeshi elementary schools via partnerships with the Bangladeshi Government and other donors, and JICA will work with Japan Overseas Cooperation Volunteers to spread the project's benefits throughout the entire country.



Class at a primary school

situation, JICA is working to promote student-centered lessons that stimulate students' interests and understanding. Specifically, JICA supports effort to enhance class content that may involve designing classes and preparing teaching materials, and applies in-class training that is widely practiced in Japanese educational institutions in order to improve the teaching capabilities.

Assistance for improving the quality of classes is underway in 25 countries, including the JICA Support Program for Strengthening Primary Teacher Training on Science and Mathematics in Bangladesh, Strengthening of Mathematics and Science in Secondary Education Project (SMASSE) in Kenya, and the Project for the Improvement of Teaching Method in Mathematics (PROMETAM) in Honduras. These programs comprehensively tackle capacity development on the three levels: the individual (improving the teaching skills), the organization (increasing initiatives of schools and education administrations), and the system (expansion of the pre-service teacher training system and establishment of a training system for in-service teachers). The importance of these efforts has been affirmed as training and the distribution of educational materials is underway on a nationwide level.

In this sector, a large number of Japan Overseas Cooperation Volunteers (JOCV) are working onsite in developing countries together with local teachers to improve the quality of classes.

Education administration and school management

Prerequisites for children to attend school and receive high-quality education is the improvement of the capability of education administrations and school management to reach non-attending children and encourage their enrollment, to allocate teachers and distribute teaching materials, to design and implement educational activities, and to secure adequate budgets. In light of this, JICA provides assistance for schools and administrations to assess issues faced by schools, develop school management plans in line with community needs, and implement those plans.

Moreover, in some cases schools are not accepted by the community or are out of touch with the community due to various ethnic, religious, cultural, or other backgrounds. To change this, it is important to encourage the participation of parents and the community in school activities and promote understanding.

In addition, JICA also supports correcting educational gender disparities as well as non-formal education to meet the needs of communities and people that cannot be sufficiently met by school education alone.

Education is a core element in national development. Based on plans drafted by developing countries, JICA works together with local governments, school staff, and other donors to provide effective assistance.

Higher Education, Technical and Vocational Education and Training

Overview

In many developing countries, opportunities to receive quality education and training tend to be limited. Consequently, human resources are not effectively utilized, thus opportunities to gain sufficient earnings are limited. The fact that human resources that lead industries are not developed has become a major bottleneck to industrial promotion and development.

At the same time, as globalization progresses, promoting knowledge-intensive economies and information-communication society, the role of higher education that cultivates core human resources necessary for economic development and provides and spreads knowledge has recently been growing even in developing countries.

Today, as basic education is being expanded worldwide, our task is to provide a rapidly increasing number of graduates of basic education with more options. In order to ensure their social participation and lead to further economic development, response to education and training after basic education is becoming more important.

In developing countries as well, the role that should be played by the higher educational institute has become greater to cultivate human resources that will lead nation-building, improve the intellectual level of the entire society, and meet the expectations of society by contributing to regional development. These days, the importance of science and technology such as IT has been highlighted, and expectations for the higher educational institute are increasing even more.

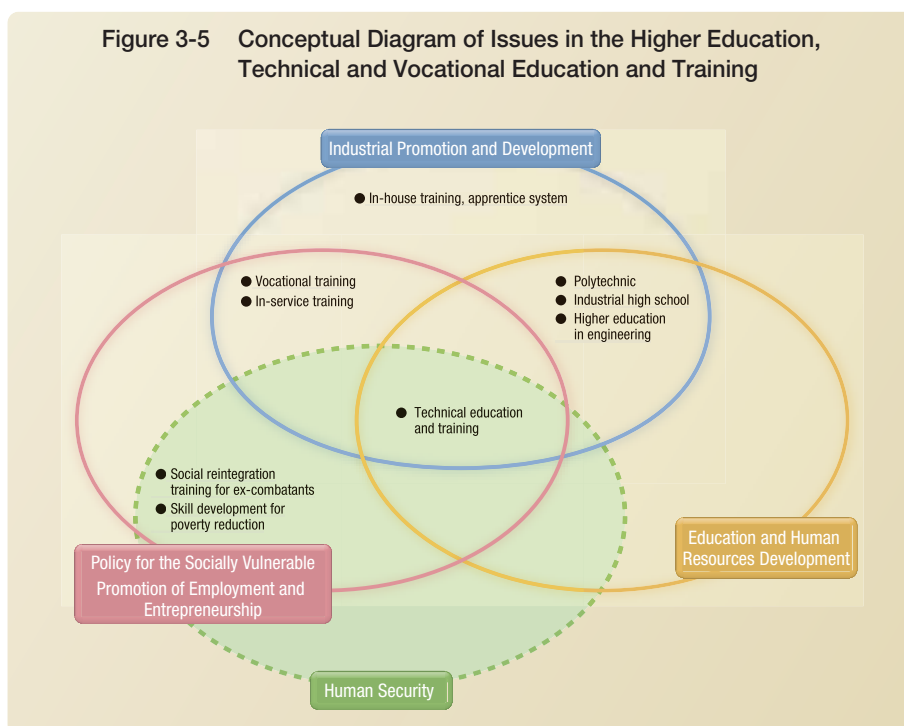
In response to the changes in the environment surrounding higher education, JICA's programs for developing higher education are becoming more diverse. JICA's cooperation has been conventionally focused on installing and expanding faculties

JICA's Efforts

Higher Education

In today's society, which is called the knowledge-based economy, the higher educational institute is strongly required to create (research), diffuse (education), and use (social contribution) knowledge and information.

Figure 3-5 Conceptual Diagram of Issues in the Higher Education, Technical and Vocational Education and Training



and departments in the technical, engineering, and science fields that are considered directly beneficial to industrial promotion and technical development. However in recent years, JICA's cooperation has been extended to support administration of higher educational institutes, social science education, and management of universities, in addition to the above assistance. JICA is also making efforts to improve the research capabilities of graduate schools and research centers; to strengthen collaboration with industry; to promote regional integration by utilizing intraregional network connecting universities; to provide distance and region-wide education; and to expand support for students coming from surrounding countries. From the global and long-term perspective, flexible cooperation activities meeting the situations and the needs of the partner countries are provided.

The Development of the Engineering Faculty of the Hasanuddin University Project in Indonesia is one example of the projects being planned under this policy. In this project, Japan will provide the necessary facilities and equipment for building a new engineering faculty via ODA loans and assist students in completing degrees through fellowships. In addition, the project includes technical cooperation to assist in formulating a long-term strategy, curriculums, and syllabi for the newly-established faculty of engineering. JICA intends to implement projects via a new approach of integrating the ODA loan and technical cooperation from the planning stage.

Technical and Vocational Education and Training

Human resources demanded by society differ depending on the state of development in each country. In countries like those in ASEAN, the Middle Eastern and South American regions, with economic development by investment of foreign capital in the background, cultivating human resources to meet the demands of industry is needed. In these countries, it is necessary to provide appropriate education and training in line with the needs of the industry. To that end, JICA plans and implements training courses with the private sector, and provides a job placement service. For example, in Jordan, a project to strengthen the managerial capacities of vocational training centers has been



Tumba College of Technology, Rwanda

implemented so that the centers can determine the needs of the labor market in the area and ensure that they are reflected in the training course.

By contrast, in sub-Saharan Africa, Southwest Asia, and post-conflict countries, industry is still undeveloped, and employment in large enterprises is not really anticipated. Therefore, it is necessary to cultivate human resources that can work in small enterprises or start-up businesses based on the concept of acquiring basic skills, addressing poverty reduction and improving livelihoods. Especially in post-conflict countries, JICA provides support in the form of skills development for ex-combatants who have just been discharged to help their reintegration into society. Meanwhile, some post-conflict countries like Rwanda have set a national goal of realizing knowledge-intensive economy. In Rwanda, which has started a full-fledged effort for developing human resources, most notably in the science and technology field, JICA provides assistance to the Project for Strengthening the Capacity of Tumba College of Technology for the provision of Electronics and Telecommunication, Information Technology and Alternative Energy courses.

Health

Overview

Health is a basic human right and is vital for socioeconomic development. Nevertheless, there are many people in developing countries who face dangers to their health and lives. For instance, the mortality rate of infants under the age of five in developing countries is 13 times the rate in developed countries, and the maternal mortality rate is 56 times higher. Health threats in developing countries are diverse and serious, including prevailing infectious diseases such as HIV/AIDS and malaria, the lack of health facilities and medicine, inadequate medical/health services, poor sanitation, unsafe drinking water, and food shortages. Women, children, and the poor are particularly vulnerable to these threats.

Under these circumstances, JICA is working to support developing health policy and systems, strengthen health and medical institutions, and cultivate healthcare workers in developing countries based on the principle of human security. In addition, JICA provides assistance for community health and hygiene activities

so that people can continually and independently maintain a healthy lifestyle through community organizations.

In recent years, civic groups and private sector companies have been launching vigorous assistance activities in the health sector in developing countries, in addition to various programs carried out through global partnerships. JICA proactively cooperates with these international health sector assistance programs in its efforts to accelerate and scale-up health sector assistance programs, including those in the area of infectious diseases, maternal and child health, and health systems, in order to protect the health of people in developing countries.

JICA's Efforts

Infectious Disease Control

Infectious diseases such as HIV/AIDS, tuberculosis, and malaria are serious problems in developing countries, especially in Africa. Based on the Action Plan in Combating Infectious

Diseases in Africa announced by the Japanese government in May 2006, JICA is committed to promoting infectious disease control programs, while respecting each country's ownership, harmonizing with other stakeholders. In the HIV/AIDS area, importance has been placed on cooperation related to improving planning management capabilities of programs, strengthening preventive and education measures centered on HIV testing and counseling, and establishing health systems for care and treatment of people living with HIV.

Besides support for preparing responses to the avian influenza in Asia, JICA also supports the fight against parasitic diseases, which are causing significant damage to the poor in African and Latin American regions, for which it has won much international praise.

Maternal and Child Health, and Reproductive Health

In developing countries, the health problems of women and children are still serious too. In the world, more than 500,000 women die during pregnancy or childbirth every year. It is one of the primary issues related to women's health. More than 10 million children die of preventable diseases before their fifth birthdays.

Under such circumstances, with the aim of achieving MDGs, JICA is proactively committed to providing cooperation to improve the health of women and children. Based on Japan's experience in maternal and child health, the first Maternal and Child Health Handbook in the Middle East was introduced to Palestine to contribute to improving maternal and child health. Additionally, JICA has been extending cooperation to improve medical services for mothers and newborns in Cambodia, Madagascar, etc., and is working to expand vaccination programs in China and Oceania.

Strengthening and Restoring Health Systems

In order to strengthen maternal and child health and infectious disease control programs in a sustainable manner, it is necessary to improve the entire health system; including the development of administration and institutions, the improvement of service-providing facilities, the optimization of drug supply, and the securing of financial resources. In recent years, many developing countries have been experiencing institutional rapid

changes such as decentralization and expansion of health insurance, which potentially have a significant impact on the access and quality of health services. JICA provides assistance in line with such trends.

In the Lusaka District Primary Healthcare Project in Zambia, which concluded in FY2007, JICA cooperated with local health administrations to help improve the health standards in poorer residential areas of the city. Specifically, assistance consisted of creating a framework for delivering health services to residents mainly via volunteers and establishing sanitation improvement activities to be conducted by residents themselves. As a result, cases of malnourishment and diarrhea in children were reduced by more than 70%. The community has great potential for providing health services, and it was confirmed that tapping the community's potential through cross-sector efforts based on human security can result in stronger health systems.

In addition, as conflicts occur across the world, there is increasing need for prompt restoration of health systems in post-conflict countries as an emergency measure. As such, JICA provides support to countries such as Afghanistan, Iraq and Sudan.

Human Resource Development for Health

The vital element in functional health systems and necessary service provision is the sum of human resources engaged in health-care services. In many developing countries, there are problems of inadequate quality of services due to an insufficient number and imbalanced placement of health professionals. Responding to the needs of each country, JICA has been providing support to such countries as Cambodia, Laos, Viet Nam, Uzbekistan, and Paraguay, for pre-service education and in-service training in nursing and other professions, and for strengthening government capacity in human resources development and deployment.

In addition to these ongoing activities, JICA is planning and implementing further assistance for human resources development in the health sector. Regional cooperation of nursing education for Central America and the Caribbean and basic health staff capacity development for Asia are among the projects currently underway.

The Project for In-Service Training of Community Health Staff in Fiji (Technical Cooperation Project)

In Fiji, a limited number of community health staff oversee a scope of operations from providing primary healthcare to health promotion activities, thus playing a key role in safeguarding community health. Against this background, the Project for In-Service Training of Community Health Staff was started to improve the capabilities of these community health staff so that they can analyze problems on-site and formulate activity plans. The project was implemented by JICA for a three-year period beginning in April 2005.

The project, which targeted central Fiji, involved the development of an in-service training system, as well as the creation of handbooks, manuals, and a skills table for providing health information and training in-service staff. A workshop was held for nursing instructors and assistance was provided for them to hold onsite training for community health staff. Furthermore, in creating materials such as the handbook jointly with the Fiji side, JICA worked to cultivate Fiji's ownership.

Fiji will utilize the know-how gained through the technology transfers thus far in independently spreading the project's benefits throughout the nation.



A discussion between nursing instructors

Social Security

The social security system is a framework to protect the lives of the citizens and guarantee the minimum standard of living for human beings. At the same time, the system also serves as an income security system that promotes the reallocation of income across the society and reduces risk to the entire society. The development level of the social security system greatly differs among developing countries. Some developing countries have developed a social security system that targets the majority of citizens while others have barely started to establish any systems. Therefore, assistance must be tailored to diverse needs depending on the development level of the system. JICA provides the following cooperation based on the experience and knowledge of Japan related to the development of social security systems.



Rehabilitation in China

Social Insurance and Social Welfare

The cooperation in this sector includes medical security and pension programs, which usually are provided in a form of social insurance, and social welfare measures for elderly persons, children, etc. It also includes protection of the socially vulnerable, such as delinquent youth and ex-combatants. Specifically, for example, JICA implements the Study on the Improvement of the Rural Pension Insurance System in the People's Republic of China and the Project on the Development of a Community Based Integrated Health Care and Social Welfare Services Model for Older Persons in Thailand.

Assistance for the Persons with Disabilities

Although welfare for persons with disabilities is usually included in social welfare, JICA does not regard persons with disabilities only as the beneficiaries of welfare services, but rather emphasizes support that assists them in living in local communities with non-disabled persons and proactively taking part in social activities as actors in development. Specifically, JICA's

assistance includes development of disabled leaders; development and strengthening of disabled persons' organizations; support for independent life; promotion of barrier-free societies; medical rehabilitation; vocational rehabilitation; community-based rehabilitation (CBR); and education for disabled persons and children. Cooperation is being implemented in countries such as Thailand, Malaysia, Sri Lanka, China, Egypt, Syria, Jordan, Rwanda, Bosnia and Herzegovina, and Costa Rica.

Labor and Employment

JICA implements cooperation in a wide-ranging sector covering labor policy, employment policy, employment service, labor standards, occupational safety and health, labor relations, as well as labor insurance such as unemployment insurance and worker's accident compensation insurance. Advisors on labor policy and labor relations and improvement of employment service in Indonesia, occupational safety and health administration in Malaysia, and capacity improvement of science technology for safe production in China are some of the project targets.

Technical Training Project for Socially Reintegrating Ex-combatants with Disabilities in Rwanda

Following years of civil war between the Hutus and Tutsis and the 1994 massacre, the Rwandan Government received assistance from the World Bank and commenced the Rwanda Demobilization and Reintegration Program in 1997. Many discharged soldiers have disabilities, and assistance via this program is limited to medical aid and supplying rehabilitation instruments. The program does not include skills support for social reintegration. Therefore, JICA focuses on promoting the social reintegration of ex-combatants with disabilities. Specifically, it provides assistance for building barrier-free vocational training institutions, fostering instructors for vocational training, and implementing technical training. So far, 202 ex-combatants with disabilities have completed the vocational training program (as of March 6, 2007), of which 144 have utilized the skills learned to earn income by joining cooperative unions, working at private enterprises, or starting own business. Moreover, the project is anticipated to go beyond assistance for ex-combatants to become an entry point for expanded vocational training opportunities for all the disabled persons.



A student at Amizero Vocational Training School