

**Ministry of Health and Social Welfare
Bosnia and Herzegovina**

**BASIC DESIGN STUDY REPORT
ON
THE PROJECT
FOR
IMPROVEMENT OF COMMUNITY BASED
REHABILITATION CENTER
IN
BOSNIA AND HERZEGOVINA**

MAY 2002

**JAPAN INTERNATIONAL COOPERATION AGENCY
CRC OVERSEAS COOPERATION Inc.**

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and Social Welfare**

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PREFACE

In response to a request from the Government of Bosnia and Herzegovina, the Government of Japan decided to conduct a basic design study on the Project for Improvement of Community Based Rehabilitation Center and entrusted the study to the Japan International Cooperation Agency (JICA).

JICA sent to Bosnia and Herzegovina a study team from August 22 to September 30, 2001.

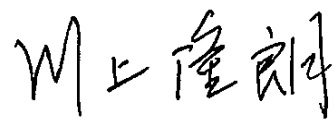
The team held discussions with the officials concerned of the Government of Bosnia and Herzegovina, and conducted a field study at the study area.

After the team returned to Japan, further studies were made. Then, a mission was sent to Bosnia and Herzegovina from January 9 to January 28, 2002 in order to discuss a draft basic design, and as this result, the present report was finalized.

I hope that this report will contribute to the promotion of the project and to the enhancement of friendly relations between our two countries.

I wish to express my sincere appreciation to the officials concerned of the Government of Bosnia and Herzegovina for their close cooperation extended to the teams.

May, 2002



Takao Kawakami

President

Japan International Cooperation Agency

May, 2002

Letter of Transmittal

We are pleased to submit to you the basic design study report on the Project for Improvement of Community Based Rehabilitation Center in Bosnia and Herzegovina.

This study was conducted by CRC Overseas Cooperation Inc., under a contract to JICA, during the period from August 2, 2001 to May 31, 2002. In conducting the study, we have examined the feasibility and rationale of the project with due consideration to the present situation of Bosnia and Herzegovina and formulated the most appropriate basic design for the project under Japan's grant aid scheme.

Finally, we hope that this report will contribute to further promotion of the project.

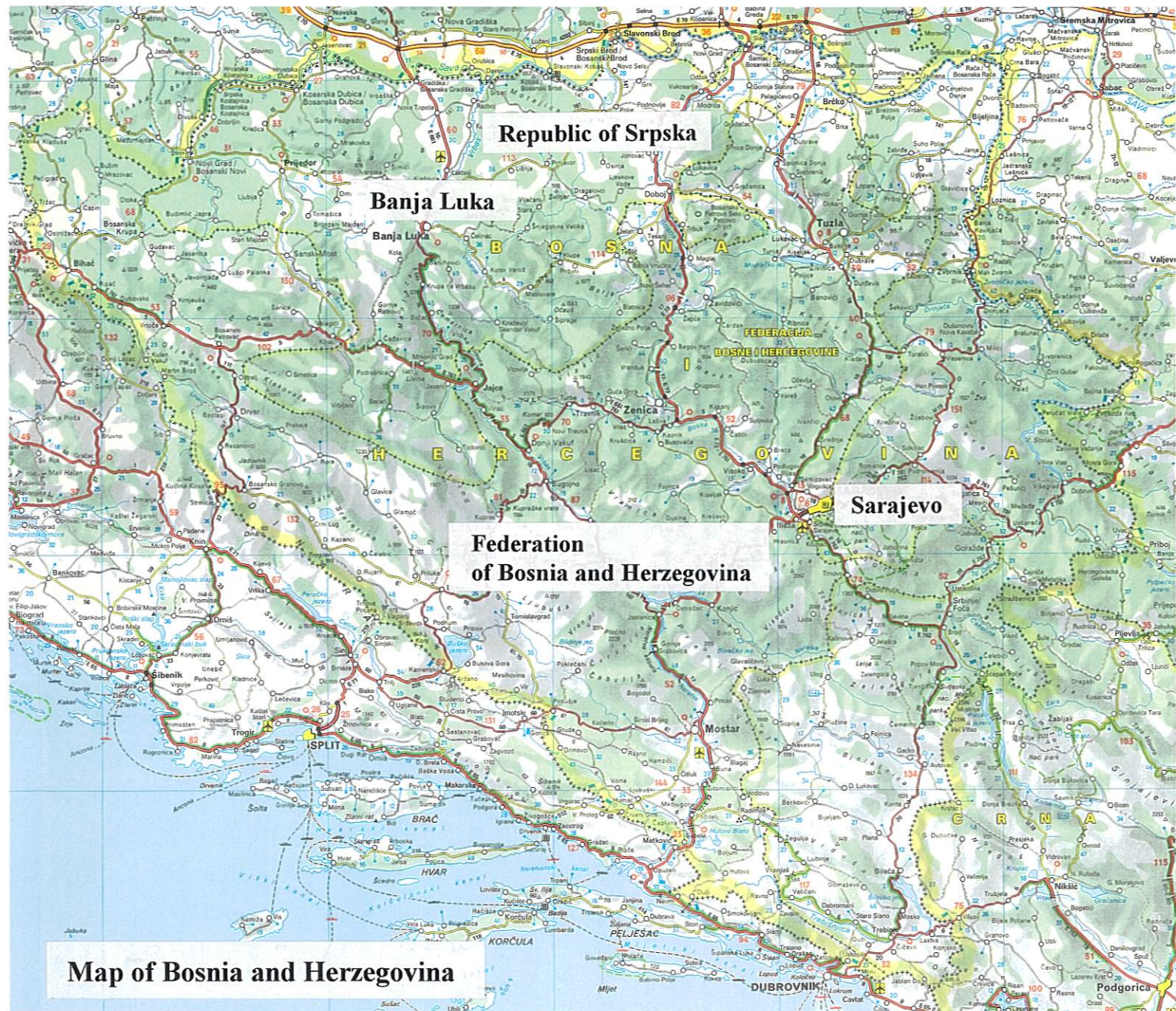
Very truly yours,

飯村 圭二

Keiji IIMURA
Project manager,
Basic design study team on
the Project for Improvement of
Community Based Rehabilitation
Center
CRC Overseas Cooperation Inc.



Map of Country



Map of Bosnia and Herzegovina



CBR center - Visegrad



CBR center - Novi Grad



**CBR center -
Kozarska Dubica**



**Road in mountains
region**



**Ultrasound Therapy Unit
(probe fixed with bandage)**



**Obsolete
Electrostimulator**



Aerobike without loading function



Dumbbell



Barbell

Abbreviations

CIDA	Canadian International Development Agency
CBR	Community-Based Rehabilitation
DM	Deutsche Marks
DZ	Dom Zdravlja
E/N	Exchange of Notes
GDP	Gross Domestic Product
JICA	Japan International Cooperation Agency
KM	Konvertibilna Marka
M/D	Minutes of Discussion
MOH	Ministry of Health
NATO	North Atlantic Treaty Organization
NGO	Nongovernmental organization
OECD	Organization for Economic Co-operation and Development
PCU	Project Coordination Unit
US\$	U.S. Dollar
WHO	World Health Organization

Summary

Summary

Bosnia and Herzegovina is located at the middle of Balkan Peninsular surrounded by Croatia and new Yugoslavia (Serbia and Montenegro) and has some 51,000 km² of total land area. 46 percent of its land is mountainous and forest areas. Although it has 10 km shoreline, there is no seaport, so this nation is in reality the inland country.

The civil war took place on April 1992 in Bosnia and Herzegovina. The war caused the destruction of most social infrastructure and the situation that huge numbers of war-dead and refugees. It is generally considered that the war left the bigger damage in the Federation of Bosnia and Herzegovina (hereinafter referred to as “Federation”) than in the Republic of Srpska (hereinafter referred to as “Srpska”). However, the war resulted in numerous casualties and serious economic damage to both sides. After the end of the civil war for 4 years, the economic condition has trended restorable, however the circumstances is situating in serious crisis.

Reflecting the civil war and floundering economic situation in post-war, the development of socioeconomic infrastructure has made slow recover with serious adverse impacts on the health and medical service sector. Most health facilities and medical equipment were destroyed by the war. Moreover, superannuated condition in remaining equipment is remarkable. In spite of such a situation, any renovations of the facilities and medical equipment replacement have hardly been conducted because of floundering financial condition in health sector. To solve these issues, the government of Srpska prepared “Strategic Plan for Health System Reform and Reconstruction 1997-2000 in 1997” supported by the World Health Organization, and is aiming at the reconstruction in health sector for the achievement of 1) reconstruction and effectuality in health finance, 2) improvement of health system, 3) reconstruction and functional restoration in primary health care services, 4) renewal and expansion of rehabilitation services in the strategy and so forth.

In Srpska, even at present, passed five years since the civil war, victims of land mines have been taking place and many people who have handicaps in their limbs are existing, especially children and farmers. Furthermore, numbers of disabled people

caused by traffic accidents or diseases are increasing. According to the estimated total of physically disabled people which international organizations such as World Bank are using, the disabled population of Srpska excluding those disabled by war is between 100,000~140,000, equal to between 7~10% of the total population of the country. 60,000 people are added who have some sort of disability due to injuries sustained in war, the number of people with disabilities reaches 200,000 in total.

Presently rehabilitative services for disabled are carried out only at the Institute for physical medicine and rehabilitation “Dr. M. Zotovic” in Trapisti and the 6 regional hospitals that have a rehabilitation department. Concerning the regional level of the rehabilitation system, Family Medicine Teams organized by the health centers (“Dom Zdravlja”, hereinafter referred to as “DZ”) and the health posts or Ambulanta provide with home visiting care for the limited areas, though most of these institutions are not equipped with facilities and equipment necessary for rehabilitative care. Therefore, the patients and their families who need rehabilitative care have to go to these 6 regional hospitals in order to receive continuous treatment, though it is physical, mental and economic burdens on them.

Under the current situation, the Government of Srpska plans to establish Community Based Rehabilitation Centers (hereinafter referred to as “CBR center”) throughout the country in order to set up a network of rehabilitation system possible to provide continuous and effective rehabilitative care. According to the amendment of the concerned law, rehabilitative care only for outpatient in secondary level health facilities is to be abolished. As replaces of these facilities, CBR centers are to be established in 22 DZs in order to make it possible to conduct rehabilitation treatment in consideration of population density in each region, regional and geological condition to avoid regional difference.

The Ministry of Health and Social Welfare of Srpska (hereinafter referred to as “the Ministry of Health”) plans to establish CBR centers throughout the country in order to set up a network of rehabilitative care and intends to provide continuous and effective rehabilitation treatment for disabled people.

Under the above circumstances, the government of Srpska has requested to the Government of Japan to implement the Project for Improvement of Community Based Rehabilitation Center in Bosnia and Herzegovina. In response to a request from the Government of Bosnia and Herzegovina, the Japan International Cooperation Agency

(hereinafter referred to as “JICA”) carried out preliminary investigation in purpose for confirmation of the background and the details of the request. After identifying necessity and validity of the Project, JICA sent Study Team to Bosnia and Herzegovina from August 22 to September 30, 2001.

The team held discussions with the officials concerned of the Government of Bosnia and Herzegovina, and conducted a field study at the study area. After the Team returned to Japan, further studies were made. Then, a mission was sent to Bosnia and Herzegovina from January 9 to January 28, 2002 in order to discuss a draft basic design, and as this result, the present report was finalized.

The initial request regarding this Project was to establish CBR center in 17 DZs and to procure the equipment: 76 items (Level 1) and 69 items (Level 2, 7 items fewer than Level 1). During the site survey, an amended request concerning the projected facilities was made, but finally the number was fixed on 17. Furthermore, there was no reason to set up any differences between the respective CBR centers, the equipment list based on Level 1 was prepared and examined.

During the site survey, in order to review the facilities targeted for establishing CBR centers, the Study Team collected the necessary information and materials covering items such as: the order of priority for the targeted facilities, the condition of the facilities, a survey of what renovation work would be needed, a survey of the condition of the existing equipment, verification of the content of the equipment to be supplied, the administration budget, the personnel plan and so on.

As a results of the site survey, procurement of 54 items for 17 CBR centers and renovation work for 16 CBR centers except for 1 CBR center (Sokolac) which is constructed by Srpska were decided to be implemented under the Project.

Detail of the project	Targeted CBR center
Procurement of 54 items including Hydrotherapy Equipment, Physiotherapy Equipment, Therapeutic Exercise Equipment, Evaluation Equipment, and Positioning Equipment	17 CBR centers including Novi Grad, Kozarska Dubica, Srbac, Laktasi, Kotor Varos, Derventa, Samac, Zvornik, Vlasenica, Sokolac, Visegrad, Ugljevik, Gacko, Trebinje, Sipovo, Teslic, Kasindo
Renovation of the facilities	16 CBR centers including Novi Grad, Kozarska Dubica, Srbac, Laktasi, Kotor Varos, Derventa, Samac, Zvornik, Vlasenica, Visegrad, Ugljevik, Gacko, Trebinje, Sipovo, Teslic, Kasindo

Expected Effects

(1) Direct Effect

1) The Contribution to Improving Health Care Standard in Srpska

In case that a network of CBR centers covering the whole country is set up under this Project, the patients living in mountainous regions or distant places who have not taken with medical services will be able to receive appropriate rehabilitative care. Thus, this project will not only give a big support to improve health care standard in the country, but also contribute to promote public health of people of Srpska. Furthermore, if, under this Project, obsolete facilities and equipment of the existing rehabilitation departments are updated and well-equipped rehabilitation facilities are established newly, the patients who are referred to the distant secondary and/or tertiary medical facilities and those recuperating at home will be able to benefit from the services within their daily lives.

2) Provision of Suitable and Effective Treatment and Consultation by Control of Accurate Patient Data

Now the records of the patients who come to the rehabilitation department are kept in a ledger called "Protocol." Within this ledger, the name of the patient and doctor in charge and the details of treatment are briefly recorded. However, the data management of the medical records of each patient and other information is insufficient and hard to obtain the accurate medical histories and precise numbers of patients coming for treatment, which is difficult to carry out effective and suitable treatment and consultation according to the records of the patients at present.

If the computer is procured, it will be possible to create an administrative system that can manage patient details and database to control accurate patient data. Owing that, each CBR center can provide more appropriate and effective treatment and consultation to the patients. Moreover, as the collection and analysis of patient data are carried out on the country scale, the Ministry of Health will be able to use the results for the decision making of the accurate medical and health care policies.

3) Provision of Continuous Rehabilitative Care without Regional Disparities

In order to receive treatment, many patients who want to go to the CBR centers are now forced to rely on ambulances, the family car, a neighbor's car or public transport such as the infrequent bus service. Furthermore, the current situation for patients who cannot use these means of transportation such as those in mountainous regions and the outlying

districts, is that they can only wait at home until they can get an opportunity for treatment, even if the need for immediate treatment has been confirmed. Procurement of vehicles for patient transportation under this Project increases the opportunity of the patients to access rehabilitation services, especially for those who living in distant areas (40-50km from CBR center), and also it eases economic burdens on these patients caused by traveling. Moreover, though people who have difficulties in walking had few chances to receive treatment because of restricted transportation means so far, they will be able to benefit from continuous rehabilitative care. If this Project will contribute greatly to create a rehabilitation network in Srpska, abolishing regional disparities in medical services, with most effective utilization of facilities and equipment procured under this Project.

(2) Indirect Effect

1) Improving Quality of Entire Health Care System in Srpska

The rehabilitative care system in Srpska is not functioned well compared with that of the Federation. However, if each CBR center provides suitable services and a network of rehabilitative care is set up by the implementation of this Project, the entire quality of rehabilitative care in Srpska will be improved. Along with implementation of the Project, technical assistance including training of human resources and technical consultation under the cooperation between Japan and Canada is under consideration. By creating this synergetic effect, the patients who go to the department of general medicine or surgery to receive rehabilitation treatment and those who are forced to wait at home will be provided with high qualified rehabilitative care either at CBR center or at home, therefore necessity for patients to go to departments of general medicine decreases. As a result, each department will be able to concentrate on the medical services that they should provide originally. This leads to improvements of quality of entire health care system.

2) The Contribution to the Priority Plan “Reconstruction Plan of Health Care System”

In order to reconstruct the postwar health care system, the Ministry of Health has proceeded with Strategic Plan for Health System Reform and Reconstruction 1997-2000 in 1997, being promoted by WHO. This plan is aimed at 1) improvement of efficiency of health care system, 2) reform of health insurance fund system, 3) improvement of primary health care services, 4) improvement of health care services of upper grade medical facilities, 5) upgrading rehabilitative care, 6) enhancement of public health including

measures against infectious diseases, 7) creating information system in the health care field, 8) strengthening strategies for medical supplies, 9) upgrading medical education. Implementation of this Project will greatly contribute to achieve one of the main goals of the Reconstruction Plan – 5) upgrading rehabilitative care.

As a result of the inspection as mentioned above, to be intended the Project for Japanese Grant Aid, and the implementation of the Project are determined valid and beneficial.

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