

School and Community Health Project: Part 1: A community development and health project in Nepal

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Abstract

This article first gives information on the School and Community Health Project (SCHP) by His Majesty's Government of Nepal, the Japan Medical Association, and the Japan International Cooperation Agency, which tried to improve the living conditions and health of the rural population in Nepal. Secondly, it describes SCHP activities as one case of a community development and health project that was implemented based on Rifkin's community development approach. To improve living conditions, SCHP conducted literacy education for adult women's and children's empowerment programs in schools. For health activities, SCHP worked with traditional healers and conducted local health manpower development through a scholarship program. As a result, the adult women's literacy rate improved from 16% in 1996 to 50% in 2000 and the majority of them formed self-help groups, made kitchen gardens, and started income-generating activities. The schools became more active in health activities through child clubs and improved hygiene facilities. Traditional healers' treatment skills and referral to government health institutions were also improved. In addition, one more achievement of this project might be the change of the local villager's consciousness from 'development as a gift' to 'development from within.' Community development and health projects can in this way contribute to improving the health and living conditions of rural people. It also has the potential to raise the consciousness of people who jointly work for community development from within. More efforts should be made to scale up these activities in a country where the rural population still suffers from poor health conditions.

Key words World health, Community health, Community development, School health, Empowerment, Nepal

Introduction

The Japan Medical Association (JMA) implemented a School and Community Health Project (SCHP) in Nepal from 1992 to 2006. Although several articles have been published on SCHP activities both in Japanese and English, no English paper has yet been published that summarizes SCHP's activities as a whole, in particular, as a community development and health project. This paper has two major objectives. The first is to show the background to why a community development approach was needed in Nepal after the

first democratic revolution in 1951. The second is to describe SCHP activities as one case of a community development and health project. The first part was written by using selected literature on the community development approach. The second part was written mostly using published peer review articles on SCHP.

Why a Community Development Approach?

Democratic revolution and health in Nepal

Nepal's overall health status has progressively improved since 1951, when Nepal decided to

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open the door to the rest of the world through the first democratic revolution. It allowed foreign aid agencies to come to Nepal, and their support began in the 1950s. As a result, the infant mortality rate (IMR), once estimated to be 255 per 1,000 live births in 1951, declined to 156 in 1969 and further to 79 in 1995.¹ The most current Demographic and Health Survey (DHS) showed that it reached 48 in 2006.²

Despite a great achievement in improving health in the past half a century, there was a huge gap in IMR among the 75 districts of Nepal. In 1994, IMR in urban areas was 62, whereas that in rural areas, it was 105.³ More strikingly, IMR of the best district was 32, whereas in the worst district, it was 201 in 1991.⁴ A similar disparity was also visible in other development indicators such as the overall composite index of development, the poverty and deprivation index, the women's empowerment index, etc.⁵

Considering the declining IMR over the decades and the existing gap in IMR among the districts, it is important to know the reasons for both. By comparing district-wise IMR data in 1991, Thapa (1996),⁴ for example, revealed that female literacy was the most important factor in accounting for variations in IMR. Using the 1991 DHS data, Suwal⁶ suggested that the most influential variables on IMR were parity, place of residence, immunization, and ethnicity.

Need for a community development approach in Nepal

Although both Thapa⁴ and Suwal⁶ also considered the importance of health care-related factors, it is worth noting that they found that demographic, socio-economic, and culture-related factors were more important in reducing IMR. Knowing that such demographic, socio-economic, and culture-related factors are important to improving health, how can these considerations be put into health planning in Nepal and how can they be implemented in practice?

According to Rifkin,⁷ health planning can be categorized into three approaches: medical, health service, and community development.

Over the five decades after the opening of Nepal, medical and health service approaches have been common in this country. In the 1950s and '60s, hospital-based and vertical programs were implemented. First, hospital upgrading was the major focus of the government. NGOs also

took the hospital-based approach. Then, vertical programs were implemented for malaria, leprosy, tuberculosis, smallpox, family planning, and child welfare.⁸ Although such vertical approaches reduced malaria, eradicated small pox, and have produced other successful outcomes, influential health sector agencies recognized that the hospital-based approach benefited only the urban population and that vertical programs were expensive to operate.

Then, as an improved method of health service approach, the concept of integration was introduced. The term "integration," however, applied only to the health sector of USAID and the Nepalese Ministry of Health.⁸

These medical and health service approaches have had limited success in achieving health for all in a country like Nepal for several reasons. First, despite the increased number of health posts (HP) and sub-health posts (SHP) in rural villages, only about 45% of households can access them within a travel time (in many cases on foot) of 30 minutes.⁹ Even if villagers can reach HP/SHP, absenteeism of HP staff is common and the annual drug rations allocated to HP/SHP are adequate for only three to six months.¹⁰ As a result, nearly three out of five households, on average, do not have adequate access to health care services. These households are disproportionately located in the western and far-western regions.¹⁰ Tailor & Tailor¹¹ described this situation as the 'anatomic structure' of the health system, without the 'physiologic function' for it to accomplish societal goals.

It is this situation, Rifkin's⁷ community development approach has the potential to improve health in rural settings, if it works. However, there are several problems with the practical application of this approach. According to Rifkin,⁷ the community development approach is different from the other two approaches in six points: views about community participation, the role of the professional, the role and the training of community health workers to support the program, evaluation of the program, and financial support of the program. Lastly, the most striking point of the community development approach is that community people take the initiative in solving health problems using health professionals as one of their resources.



Fig. 1 Map of Nepal

School and Community Health Project in Nepal

Khopasi primary health care center

a) How did it start?

In 1990, the second democratic revolution took place, which allowed Nepal to start a new, democratic political system. After the revolution, the newly elected government created a new health policy based on a primary health care approach. It was in this context that the Nepalese government requested support from Japan for implementation of the new health policy.

To respond to a request made by His Majesty's Government of Nepal (HMG/N), the Japan International Cooperation Agency (JICA) sent a project formation survey team in 1991, which was headed by Dr. Toshio Murase, then deputy president of the JMA. The mission report made

four key recommendations. 1) A healthy village approach should be taken; 2) The bottom-up function should be strengthened; 3) Community health activities should be conducted through HP/SHP; and 4) Nepal's new health policy should be supported. Dr. Tadatoshi Kuratsuji then made an additional survey in 1992, and on December 15, 1992, HMG/N, JMA, and JICA launched the SCHP in the Khopasi village development committee (VDC, the minimum local government body in Nepal, with a population 2,000 to 5,000 for each VDC in a hill region). JICA dispatched two Japanese experts for SCHP, and JMA has worked as an international non-government organization and allocated the budget for project activities.

b) Target area and initial activities (Fig. 1)

Three parties agreed to implement the project in Khopasi in response to the government need to improve rural health care in Nepal. Khopasi was located in Kavrepalanchowk, a hilly district roughly

sixty-five kilometers southeast of Kathmandu.

During the initial phase of the project, SCHP completed the construction of the Khopasi primary health care (PHC) center in December 1993 and started its operation in January 2004. The center was equipped with a laboratory and an ambulance car, and provided both preventive and curative services to a population of 100,000 in the southern part of the Kavrepalanchowk district. However, mostly due to difficult geographical conditions, only residents who live around the center tended to use the center and outreach activities were also limited. That is why since 1995, SCHP started to take a community development approach conducting a pilot literacy education program for women and a pilot school health program.

Community development and health activities in rural Nepal

a) Shifting focus from central to rural

While the Khopasi PHC center retained the target population of 100,000 in the southern Kavrepalanchowk district, SCHP decided to narrow down its target area from a center to ten rural VDCs, and then later, it was increased to fifteen. The estimated population of the fifteen VDCs was approximately 45,000 in 1997.¹² Several different ethnic groups reside in the area, including the Tamang, Newar, Brahmin, and Chhetri. Among them, the Tamang comprise the majority. The villagers had no electricity, telephones, or vehicular roads. Reaching the nearest vehicular road required a two- to sixteen-hour walk from these communities. The area included eighty-four schools and fourteen government health institutions (HPs, SHPs) in 1997.

b) Major activities

SCHP had two major objectives. The first was to improve living conditions through community development activities. The second was to improve health through local human resource development for health. Both objectives were made considering Rifkin's six points for community development approach in mind.

b-1) Improving living conditions

This activity consists of two major programs. The first is women's empowerment through literacy education and self-help groups (SHGs). The second is children's empowerment through child-to-child activities.

b-1-1) Women's empowerment through literacy education

Literacy education was taken up as part of SCHP activities based on two articles. One article showed that increasing rural female community health volunteers' literacy levels improved the quality of their services in Nepal.¹³ The second article stated that an improved literacy level was the main contributor to reducing infant mortality rates.⁴

Started in 1995, SCHP's Adult Literacy Program made more than 3,500 adults literate through 170 basic literacy classes and 168 post-literacy classes. Both classes were conducted for six months per year. Among the post-literacy classes, 157 formed SHGs for launching savings and credit groups and kitchen gardening activities.

As a result, the female adult literacy rate in the target area increased from approximately 16% to 50% during the period between 1996 and 2000.

According to Acharya et al.,¹⁴ during their discussions with the women, participants valued the post-literacy classes on sanitation, immunization of children, dehydration therapy, and family planning. More specifically, they became familiar with immunization against tetanus, diphtheria, pertussis, measles, and various malnutrition problems. The discussions revealed that these programs improved awareness of the use of *Jeevan Jal* (oral rehydration solution) in diarrhea, green vegetable intake, safe drinking water, and the protection of food from dust, flies, and insects. Moreover, approximately one third of the participants began recording income and expenditure in their daily lives.

b-1-2) Kitchen garden training

SCHP started kitchen garden training for literacy class graduates and attendants as literacy skills themselves were not sufficient to improve living conditions and some husbands started to complain of their wives' absence at night.

At the time of the mid-term evaluation of SCHP in 2000, 2,197 participants had received kitchen gardening training, of those, 44% had already made kitchen gardens prior to the training. Encouragingly, nearly one third had just started it after receiving literacy training. Approximately two thirds had developed traditional gardens. After five years of program intervention in rural areas, nearly all the participants made kitchen gardens. However, participants expressed various problems in this activity during discussion. Disease and pests were the most frequently

Table 1 Development process of a self-help group

Steps	Dates	SHG activities	SCHP support and requests
Forming	Dec-94	Construction of classrooms for literacy education	← Needs assessment meeting
		Participation for basic literacy education	← Implementation of basic literacy education (supervision and teaching for 6 months)
		Provision of support for a literacy education campaign on nationwide educational promotion day	
		Activities other than literacy education (e.g., street cleaning)	
	May-95	Implementation of making home gardens	← Implementation of training for making home gardens
		Requesting practical literacy education	→ ← Provision of technical training for facilitators for practical literacy education
Dec-95	Participation for practical literacy education	← Initiation of practical literacy education ← Provision of second training for facilitators End of practical literacy education	
Jun-96	SHG establishment	← Recommendation of establishing SHG	
Norming	Aug-96	Group works (e.g., rule creation, role sharing, monthly meeting)	
		Requesting training for construction of portable toilets	← Provision of training for construction of portable toilets
		Constructing toilets in every SHG member's household	
		Requesting support for constructing a library	→ ← Provision of library construction funds
		Provision of support for a nationwide vaccination campaign	→ ← Requesting support for a nationwide polio vaccination campaign
	Dec-96	Requesting training in first aid	→ ← Provision of training in first aid
	Requesting training for income-generating techniques (SHG members invested their pocket money in a "goat bank.")	→ ← Provision of training for income-generating activities (i.e., management solution for the "goat bank") Provision of partial loans for the "goat bank"	
	Revision of group rules		
Performing	Mar-97	Three SHG members implemented training for construction of pit latrines in a nearby village. Financial support for a critically ill mother Volunteer activities for UNDP river conservation project Provision of support for construction of portable toilets in nearby villages	← Requesting training for a women's group in a nearby village to construct pit latrines

←: Request from SHG to SCHP

→: Support or request from SCHP to SHG

*Cited and modified from "Sato C, Jimba M, Murakami I. Adult literacy education as an entry point for community empowerment: evolution of self-help group activities in rural Nepal. *Technology and Development*. 2000; No.13: 35-44.

reported problems in the community regarding kitchen gardening activities. Likewise, there were other problems such as lack of seeds, training, and information, and water for irrigation.¹⁴ Still, it was effective to improve living conditions instead of simply conducting literacy education.

b-1-3) SHG activities

b-1-3-a) Development process of one SHG

A self-help group called "*Khushiyali* (Happy) Women's Group (KWG)" was first formed in K village after completion of the basic and post-literacy classes. The development process of KWG

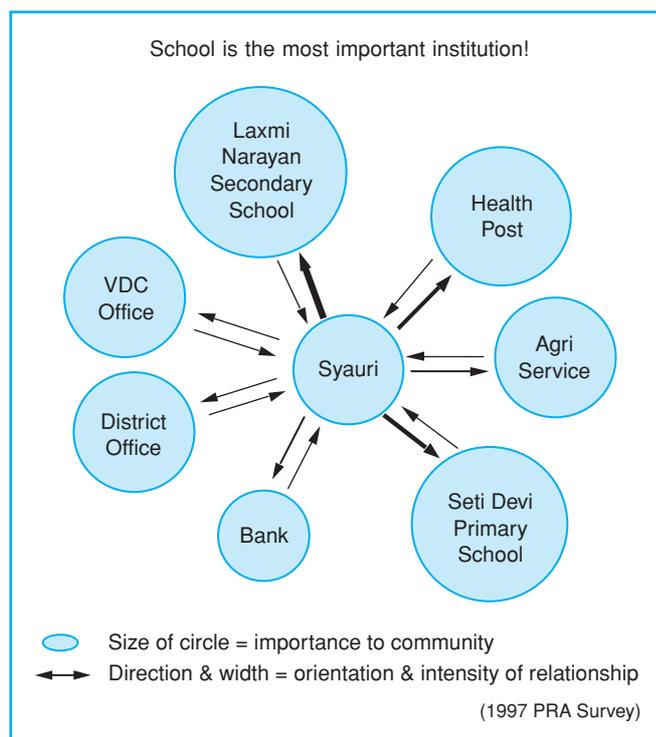


Fig. 2 Participatory rural appraisal survey about the importance of available institutions in Syauri village

and a description of the cooperative relationship between KWG and SCHP is offered in Table 1.¹⁵ Below is a summary to explain the process.

Step 1: The Process of Forming

Table 1 shows the steps in the growth of the SHG in K village. A quick glance at Table 1 reveals heavy support from SCHP for KWG, which is indicated by arrows pointing to the left. It is clear that there were more approaches from SCHP to KWG than vice versa, and that most activities, during this stage, were undertaken on SCHP's initiative.

Step 2: The Process of Norming

As indicated in Table 1, the number of arrows from the right increased during this stage. This reflects SCHP's responses to KWG's requests for support. Thus, during this stage, the SHG gradually began to initiate more activities than SCHP.

Step 3: The Process of Storming and Performing

Table 1 indicates that during this period, the SHG started to become more self-reliant. In keeping with this, the relationship between

KWG and SCHP moved from 'aid agency' and 'beneficiary' to 'partners' as the SHG was able to respond to SCHP's requests. Thus, in this period, a partnership between them developed.

b-1-3-b) Scaling up SHG

After KWG, SCHP was successful in scaling it up, and 157 SHGs were formed by the end of 2000. These SHGs initiated several activities. The example below highlights the income generation activities of four SHGs.

'... SHG funds were on an increasing trend in every community. According to a four-case study in three villages (one from Mate, two from Gairigaun, and one from Bhanjyangkhark) in the mid-term evaluation, the average annual interest income earned by group investment was Rs. 600 (Nepali rupees: 1US\$ = Rs 68.25 in July 2008), and the interest rate was 24% in all groups. In half of the cases, however, group membership was declining. According to the discussion, the major reason was the inclusion of many unmarried young women in the groups. Once they got married, they left the village and became less interested in continuing fund-

raising activities, whereas the married women were supporting these activities, as they were permanent dwellers in the community. The nature of group investment varied. According to the discussion, Mate community participants were receiving loans for household expenses, whereas in Gairigaun, money was borrowed for poultry and pig raising. Of the three people receiving loans in Bhanjyangkhark, one was producing local liquor, another was producing *dalo* (bamboo baskets used for household purposes) and *namlo* (the rope or band passed round the forehead that supports a load carried on the back), and the third was raising goats. Although small, these were also noteworthy impacts of the SHG activities.¹⁴

b-1-4) Children's empowerment through a school health approach

b-1-4-a) Why school health?

School health has been prioritized by donor agencies as it is cost effective,¹⁶ the target population is big,¹⁷ school children are not as healthy as expected,¹⁷ and better health can contribute to better educational achievement.¹⁷ In addition to these perspectives, SCHP found out several additional reasons to justify school health activities in their target areas. A participatory rural appraisal in 1997 revealed that of twenty-eight target communities in fourteen VDCs, approximately 70% of them regarded schools as the most important institutions compared with other institutions such as government offices (district office, VDC office, and agricultural office), banks, and others. One example is shown in Fig. 2. As the villagers consider schools to be the most important institutions, they get together when they conduct mass meetings, and a school can thus be used as a center for different types of community development activities.¹⁸

To implement school health programs, SCHP initially targeted school teachers, but most of them came from urban areas and frequently took extended leave. SCHP was then obliged to target school children and their parents for their school health activities. Then, SCHP initiated the Supportive Healthy Environment Program in 1997 and the Child Initiative Program in 1998.¹⁸

b-1-4-b) Supportive Healthy Environment Program

This program aimed at creating a supportive environment for health in schools. Its major activities were to establish safe drinking water

and toilet facilities in schools and to implement health education programs for hygiene.

For this program, first, the school children's parents and other villagers made significant contributions. To install one school toilet with a septic tank system and a safe drinking water supply system, it cost approximately US\$1,100. As many drinking water supply projects were active in the target villages, it usually required only water pipes to link them from nearby, existing pipes. Of \$1,100, the donor agencies provided 65% in cash to buy materials. The remaining 35% was provided as labor cost from the villagers. In addition to SCHP's own budget, UNICEF also supported this program.

As a result, while only 20% of all the target schools had both a functioning toilet and water supply system in 1995, 100% of them had set up this system by 2001. Every time after completion of these two facilities, a health education program was also implemented.

b-1-4-c) Child Initiative Program

SCHP initiated the Child Initiative Program using a child-to-child approach. This is an approach to health promotion, which focuses on the contribution that children and young people can make to their own health and well-being and that of their families and communities. Through an active learning process, children are able to participate in identifying health problems and in playing an active and effective role in providing solutions.¹⁹

In Nepal, the Save the Children Fund (UK) first adopted the child-to-child approach first in 1989 to involve schools as part of its outreach program from maternal and child health (MCH) clinics. Similarly, Redd-Barna, Hatemalo Sanchar, and other NGOs adopted this approach.

In practice, SCHP helped each of eighty-four schools to form a child club with seven to nine members and facilitated various activities, such as school toilets and drinking water management, health quiz competitions, and deworming or immunization campaigns. UNICEF also started to support this program from 1999.

As a result, whereas no such child clubs existed in any of the schools in 1998, all the schools formed a child club in 2001. The club members joined the above-mentioned health activities and have also come to work as health messengers for their families and communities.

b-2) Human resource development for health

b-2-1) Healthcare-seeking behavior survey

Improving living conditions through community empowerment may help to improve health, but it takes time. To improve health, certain kinds of health-specific activities are also necessary. SCHP conducted several health-specific activities after conducting a healthcare-seeking behavior survey.

In 1997, SCHP carried out a healthcare-seeking behavior survey for randomly selected 425 households, and obtained data from 405 of them.²⁰ The results revealed that some form of illness strikes about 50% of households in rural Nepal each year. When rural Nepalese feel sick, they seek healthcare only when the sickness is moderate or severe. Mild illnesses are treated at home. When the villagers seek healthcare, it was found that rural Nepalese preferred to visit traditional healers first, before visiting other health workers. They prefer to visit traditional healers because they are highly accessible, do not charge cash, and can tell whether the diseases are caused by evil spirits according to another study of SCHP.²¹

When health planners devise health policies, they tend to focus first on improving the hospitals, then on HP/SHP, and finally community-based health workers including traditional healers. However, these results show that the majority of rural Nepalese seek care of community-based health workers first and they use HP/SHP secondarily, only if they find it necessary. This study thus urged SCHP to work with traditional healers.

b-2-2) Working with traditional healers

SCHP started to work with traditional healers, also supported by further evidence of the benefits of working with them.²²⁻²⁵

In 1996, SCHP conducted a traditional healer training program in western medicine for fifty healers. These healers were selected from 269 healers in ten VDCs, based on the following criteria: the healers should be interested in the training, highly respected in their communities, and physically fit and enthusiastic to work anytime in their own VDCs. The first objective of the training was to give basic knowledge about common illnesses (diarrhea, stomach ache, helminthes, fever, etc.) and HIV/AIDS. The second objective was to increase healers' referrals to HPs and SHPs when the healers were unable to treat illnesses. The third objective was to provide them with a first aid kit that contained simple western medicines so that they can increase

treatment skills for common illnesses.

Using a training manual developed in Nepalese, four instructors trained the healers. One year after the training, SCHP conducted an evaluation survey with forty-eight healers (two died within a year) and thirty randomly selected untrained healers. As a result, SCHP found that the trained healers had a better knowledge of allopathic medicine, practiced modern treatment using the first aid kit, and were more likely to refer patients for HPs and SHPs.²⁶ They also improved their relationship with the governmental health workers in these institutions.

b-2-3) One doctor from one VDC

When referral was made, it was questionable whether government health workers were in the health institution and could indeed help these referred patients. As most health workers came from outside the target area and none of them were local, SCHP decided to give scholarship to young, local applicants who were interested in becoming skilled health workers in the future. As a result, SCHP gave scholarship to at least one to two from each VDC (eighteen in total) and trained local health manpower. They attended a fifteen-month auxiliary health worker course (a graduate can become a SHP in-charge) or assistant nurse-midwife course; some of them became government employees and others became private physicians in their own villages.

c) Selected outcomes

In 2000, SCHP conducted a mid-term evaluation with support from New Era, a well-known health research institute in Nepal. In 2002, SCHP also made an internal evaluation. Although the evaluation results were not published, below are the major outcomes of the SCHP activities.

c-1) School health

In 1996, only 20% of schools had functioning toilet and water facilities, but in 2002, 100% of the schools had them (by 2002, target schools were increased to 103). During this period, 100% of schools formed child clubs and received a first aid kit and formed school management committees.

c-2) Community health

In community health, the adult literacy rate was improved from nearly 16% in 1996 to 50% in 2000 in the target area. The number of SHGs increased from zero to approximately 160, and 12,633 community people took part in several health education courses (some who attended twice or more were counted multiple times).

Box 1 A letter from a SCHP project staff member to a Japanese public health nurse expert which shows raising consciousness after joining SCHP

‘Sister, how I can express my heartfelt thanks for you. I have changed a lot in the past four to five years, which I could not imagine in the past. I feel like I am now standing on a new world. When you first came to my village, I wanted to talk to you, but could not. I had no confidence about what I would say in Nepalese. I was so disappointed.

Then later, I got a chance to attend a literacy education training course as I was selected to be a teacher of a literacy class in my community. The other participants were older than I and were highly educated. I again lost my confidence.

However, little by little, I started to feel, ‘I am also the same human being, I can do as they can do.’ I attended the training course enthusiastically and studied until late at night. Then the course ended. Then, I became confident in myself and could manage to run a six-month literacy course in my community.

After that, I attended more and more courses and became more confident in development activities. I graduated only from 8th grade. I am not well educated and am not rich. However, I started to realize that ‘being rich’ means that I have confidence within myself, and I can be being a fighter in seeking a better living.

My parents gave me birth and raised up. But it was you who have shaped my life. You showed me the way to go, too. Then I could gain a confidence and hope.

Now I am going to marry . . . I want to still continue to work with you. Please do not forget me even after my marriage.

Please come to my wedding ceremony with the project staff members. Finally, I am sorry if I’ve made any mistakes in this letter.’

(Cited and modified from “Jimba M. Public health and globalization. In: Hoshi T. ed. Social Security and Health of the Individual 2: public health, Textbook for Nurses 8, Igakushoin; 2002: pp. 264–277.”)

Ninety-six traditional healers were also trained and eighteen local villagers became assistant health workers or assistant nurse-midwives.

c-3) Conscientization

One of the hidden outcomes of this project was raising consciousness about development. In the beginning when the project started in rural villages, people used to say ‘development means a gift from outside.’ ‘It is a hospital, it is a road, there is nothing I can do or I should do for development.’ It was a common consciousness in the target area. However, in 2001, one local staff member from one target community sent a letter to a Japanese public health nurse expert, which is shown in Box 1, and which showed her internal change as a conscientized human being after her

involvement with SCHP.

Conclusions

SCHP conducted a variety of community development activities considering Rifkin’s six points for community development approach. It aimed at improving the living conditions and health of rural Nepalese. As a result, it gained positive outcomes mentioned above. Improving the numbers is indeed important, but one letter shown in Box 1 is also precious for those who remain in development activities. Community development and health projects can in this way contribute to improving the health and living conditions of rural people. It also has the potential to raise

the consciousness of people who jointly work for community development from within. More efforts should be made to scale up these activities

in a country where the rural population still suffers from poor health conditions.

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