

Community Driven Low Cost Strategy to Develop Sustainable WASH Services in Poor Urban Area of Lahore Pakistan: A Component Sharing Model Case Study of Lahore Pakistan

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ABSTRACT: This study was carried out in September 2010 to analyze & assess the efficiency, effectiveness, affordability and sustainability of community based integrated water supply, sanitation & hygiene development in very deprived & poor semi-urban community of Lahore Pakistan. There were 6 hamlets under jurisdiction of these services in which 4 hamlets selected as a targeted population. Structured interview technique was used for data collection and 100 households were conducted interviewed about existing situation & services of the project and probability simple random sampling technique was used for interviewing the local community. Focus Group Discussion & personal observation approach was also practiced for collection more concise data about interventions in local area while total 20 Focus Group Discussion session conducted and 5 in each hamlet with equal women participation.

WASH services developed on the philosophy of component sharing model which have two major component Named External & Internal. External component of the project was designed and funded by the Government of Punjab whereas internal component was completed by the community on self-help base. Women were engaged in this project and they influence on their family members to take part in the project by financial and men power. A local water & sanitation community organization (WASCO) was organized and after the project development all the infrastructure was handed over to the WASCO that was running the project successfully.

KEYWORDS: Component Sharing Model; Public-Private Partnership; WASH Sustainability; Efficiency; Accessibility & Affordability ; Disease Level; Women water user group.

1 BACKGROUND OF THE STUDY

Equal access to safe drinking water & adequate sanitation considered a basic human need and right without any discriminating based on rural urban (World Water, 2009). Low income communities had to face very critical time to achieve the basic needs in developing countries (WHO & UNICEF, 2010). These people spend more their time in fetching water to meet domestic needs (Cairneross et al, 2005). Women have to perform their duties in managing water and secure it from

contamination (DeNormandle and Sunita , 2002). Women assumed a key factor of social change in all the sectors of development (Robert et al., 1989). But at the same time there found a huge level of gender based discrimination even in enjoying basic needs (Fahim & Javed , 2011).

International development community striving best to achieve MDGs in given time frame but there is a big gap to win it in developing nations (UN Water, 2011). Pakistan is facing low institutional capacity and political instability which playing very negative role in provision of WASH services in local communities (WWF, 2011). Sanitation poverty and unhygienic condition play their vital role in prevalence of communication diseases and environmental hazardous at high level in the poor local communities of developing countries (Dilwara, 2002). Water supply & sanitation's Project developed with local community engagement secure its sustainability and reduced water related vector born disease and improve environmental condition (Bilqis et al., 2002). Community driven approach of WASH development always reported in cost effective and long term running with sustainability aspect as community considered it their own property which develop local communal project ownership. Community ownership of infrastructure ensures sustainability, affordability and accessibility of WASH services (Carol et al., 2008).

Lahore is second largest city of Pakistan and is provincial capital of Punjab. Union Council 60 of Aziz Bhati Town situated near Ranger head quarter Lahore had not access to safe drinking water and adequate sanitation (WASA-Punjab, 2009).The community living in the area reported serious health related issues as they had not adequate water supply and sanitation services by state and this Poor sanitation, unsafe water and unhygienic environments cause serious disease in women, old aged and children to suffer many water related and water borne diseases (Hameedullah , 2010).Scarcity and misuse of the fresh water resources pose a serious and growing threat to sustainable development, environment protection, human health, and welfare and food security of the area (WHO ,2004). In the Badar colony there was much worse condition of the sanitation and people were facing the sanitation poverty of all types. The disposal of the excreta was unsafe, people were poor, toilets were improper and almost 7 people have the facility of just one toilet. Flush and discharge of sanitation system was being practicing. The excreta were disposed off through excavating a small sanitation well with 40 feet depth; this unethical practice poses very serious and dangerous impact on the ground water contamination, soil pollution, and nutrients loss.

People of the area had very low literacy rate and limited awareness about the hygiene education and water resource management. A Community young man reported "*elders and children's health is affected as the sewage water is mixed with the drinking water*" (Urban Unit_P&D, 2009). The existing water supply source was Ground water which people take through instillation of small motor pumps to extract ground water. This motor pump increases the economic burden on community in the shape of paying the electricity bills and also effect negatively to aquifer and ground water . Mostly people cooked their food in the open & they also did not take any measure to minimize food contamination. The streets were not paved and there was lot of soil loss in the rainy season due to the surface runoff. On the time of rain even children were not able to go school and this lead to the absent from school, put harmful effects on the child education (PHED, 2010). Water born diseases profile was very high at sanitation poverty contributes in disease prevalence rate in low income communities (Rahaman, 1989).

There was not any microfinance institute and their activities to driven the poverty and help community to even make possible to meet the daily basic needs (Wasif et al., 2010). The over view of this area was very porn and relative of the community never come and wish to meet them as these people were facing the sanitation poverty and inadequate water supply system, in the result people of badar colony were in the inferiority complex and remained mentally upset all the time (Civil Defense, 2010).

Many young girls have not any proposal of marriage outside from the community even from their relatives due to improper water, sanitation, and poor hygienic condition of the area. This problem make highly enhancement in the anonymity stuff of the parents and make a question mark on the future planning of young generation and their life status (Women Development, 2009).People of the badar colony never used the boiled water for the drinking purpose. The access to hygiene information was limited due to poverty, low literacy and low mobility. The only source of health and hygiene information was T.V and relatives which is always limited in scope.

There was a great complaint of the women that due to using the ground water they were facing the chicken poxes, scabies and hair fall issues. Very low social status and privacy for the women was at that area which was a question mark on the women dignity (Faheem &Yasir , 2007).

The sanitation poverty made a question mark on the dignity of the women and young generation of that area. A high rate of the disease occurrence rate was examined and water related vector born disease were at the high rate. There was a strong

association between community health, environment, and health behavior, literacy rate, poverty, and socio-economic status (City District Government, 2008). The gendered nature of health and hygiene issue clearly required a health and hygiene strategy which addresses women, their low literacy and means of communication to make an intervention of water and sanitation by any governmental department like (WASA Lahore) or any other service provider agencies like NGOs and INGOs to develop a successful Water, sanitation, Health and Hygiene program in the area to provide them the basic human right at optimum level. They were striving and had desire for the change in their life by making the successful intervention in the WASH Sector at Badar colony UC 60-Lahore (Nazir & Hussainy, 2007).

1.1 INTRODUCTION OF THE PROJECT

Changa Pani Programme a strategic initiative of the Government of Punjab through Urban Unit, Planning and Development Department in Partnership with City District Government Lahore, WASA Lahore (Water utility) , Anjuman Samaji Bahood (ASB) a civil society organization. The Changa Pani means good water and its name was developed in the local language of the community so that community made it their own belongings. The purpose was to design and implementation of integrated water supply and sanitation project for poor un-served community of Badar Colony. The project was developed to provide an efficient, reliable, affordable and environmentally sustainable WATSAN system in poor Urban Area of Badar Colony UC 60 Lahore for policy learning provision the basic human rights and attainment of Millennium Development Goal (ASB, 2010).

1.2 PROJECT CONCEPT

The community involvement paradigm was officially adopted by the international community during 1977 World Water Conference in Mar del Plata, Argentina.

The conference adopted a slogan which was "Water and Sanitation for All". The project is based on the integrated approach of water and sanitation for UC 60 community.

This project presented an ideal opportunity for demonstrating mechanisms for improving urban services within the current institutional limitations in the light of National Sanitation Policy of PAKISTAN.

1.3 COMPONENT SHARING MODEL

Change Pani Program developed on the philosophy of component sharing model that was basically the division of the responsibilities and a strong but successful strategy to make sustainable development through Public private partnership .it had two components external and internal component. External component developed and funded by the Government of the Punjab and internal component with the community partnership on the self-help bases.

In the external component Government Develop and install the main water supply lines , main, sub-main and trunk sewer line, tube well with 700 feet depth to excavating the pure fresh water for the community, A disposal station to treat water before linking it to other water bodies the Overhead reservoir with the capacity of the 50 thousand gallon water storage. Government developed office Name "*CHANGA PANI PROGRAM OFFICE*" in the project area and was responsible to pay the salary of *change Pani Staff* with provision of the Computers and other logistics.

Internal component was totally developed by the community participation on the self help bases. Internal component was involved in the installation of the water supply and sewer lines in the link streets. It made a water supply and sewer connection at the step door of the household but household were responsible to make their connection in the home and link it with the street installed WATSAN Lines. The Community contributed in the infrastructure development with cash and share 39% of total project's cost. They participate at equal level and there was not even a single household which was free to take the WATSAN connection so all the community household paid for their facility.

The much vulnerable and poor household was facilitated to pay their connection fee in the easy installment but not free to pay at all.

2 OBJECTIVES OF THE STUDY

- To know how extent women play positive role in project success
- To determine how extent people are satisfied with Changa Pani Services
- To know the social, economic and health impact of this program on the local community
- To determine the influence of this project on physical environment

3 METHODOLOGY OF THE STUDY

For the collection and getting the actual facts and public opinion about the project intervention an interview Survey technique was adopted. The project area has five towns with the population of 22000 people. Usman Town was targeted area for data collection in which almost there were 250 household with population of 1550 persons. This was chosen because the people of usman town were the pioneer of participant in this project, all the household of this area had WATSAN Facilities of this project and it was near to main road for the easy access and mobile of researchers. 100 households were visited and interviewed as a representative sample and simple random sampling technique was used. The questionnaire was developed in the local languages (Urdu & Punjabi) for facilitate the respondent and Interview method was adopted for data collection due to the low literacy rate of the community. Focus group discussion and personal observation approach was also uses for the observing the visible environment and public solid opinion about project intervention. 25 Focus Group Discussion Session carried out with equal women participants. For making the strong and real mature form of data the Minimum age of respondent for this research was above 18 year. Only those household was taken for interview who were the beneficiary of this project, and was enjoying the WATSAN facilities of Changa Pani Program. Statistical Packages for Social Sciences (SPSS) tool was used to analysis of data and results discussed on the bases of Percentage & Frequency distribution of public opinion.

4 RESULTS AND DISCUSSION

This project was developed with community participation and Women play very active and important role in the success of this project. Women Water Leader and Water User Group was the back bone key of the success of this project. This program play very vigorous role in Improvement of Environmental Condition of the project area, this was an Entry point of human development, Water bills recovery Rates, Education Improvement and Community Satisfaction with the Working of the WASCO. All the concerning aspects and characteristics were come into real life with the women and other community member's participation.

4.1 SOCIAL MOBILIZATION AND WOMEN ROLE

Women Played very significant role in the process of this project. In this project there were some mobilization officers who go to field at daily basis for discussion and mobilization to community people about the current water, sanitation situation, its problems and solution with the respect of community members. Female social mobilization officers meet with community women and discuss their problem related to the WASH. They also ask them about secure & possible way to get rid of this Water, Sanitation, and Hygiene (WASH) poverty and how to improve it. All the matter was come into account especially the women issues regarding WASH. After that women mobilization officer ultimately win their trust and guide them how to make the union and group to resolve the problems. Then all the women of the street come into the same way under same canopy, discuss their issues and make the mechanism of solution. Slow but gradually Women Street Water Leader Committee come into account and all the women of this committee elect one Women Water leader of the street.

Same like this way at least one Women Water Leader Committee (WWLC) developed .this Leader was also a member of the Town Water User group. This Town water user group elects their Town Water Leader who becomes the member of the Water and sanitation community organization (WASCO).In this way women get a dignified social status and role in the community. All the women convince and mobilize their family members and husbands to take keen interest in this project. They Save money from daily wages and participate in the Internal Component of the project. All the women take part in the financially involvement in this project. They arrange the weekly meeting with the men WASCO Committee and discuss all the developmental aspects of the project and street. Women also make their involvement in the Monitoring and Supervision of the working when water, supply and sanitation pipeline were in the process of the installation. Women of the street Request and motivate to their men for doing manual work when these pipelines were in the installation phase and save the money which were be spent to other digging labor.

4.2 HEALTH & HYGIENE EDUCATION IN SCHOOLS AND ESTABLISHMENT OF VOCATIONAL TRAINING INSTITUTE FOR LOCAL COMMUNITY

There was a young women health educator in the Change pani program team. She daily do visit at least 7 schools which were in the project area and deliver lecture there for the promotion of the hygiene and public behavior about the water and sanitation utilization. All the team members of the Changa pani do daily visit to project, mobilize and motivate the community members and influence the water and sanitation utilization behavior, facilitate the street WASH Promotion leader to collect the money and make the installation of the WATSAN Pipeline.



Figure 1. Health & Hygiene Education in Schools establishment of Vocational Training Institute for Local Community

To highlight and eliminate the gender and women issues a Women water user group was also developed by the community in the result of the social mobilization of CPP Staff. That women water user group address the WATSAN related issues and help in the influencing their male members of the house to engage and participate in the project to attain the WASH Facilities. Through mutual understanding and strong cohesions between community and Governmental departments this project 100% completed successful. Changa Pani Community based Vocational Training Institute had been developed where women and child (school child after ending timing of school) of community areas are trained to generate money and empowered them in a best way. Women and children get training here after that they go to their own home and work independently and help their family bread winner make the life easy and enhance social status of their family and give dignity to the women as now they are not more burden on the household but an earning hand.

4.3 ESTABLISHMENT OF WATER AND SANITATION COMMUNITY ORGANIZATION (WASCO)

A community based water and sanitation community organization established. In this organization all the streets have their one representative which was elected by the consent of all the street households. This representative was responsible to collect money from the street, buy the logistics, like water supply and sanitation pipes, its installation, monitoring and management. All the representative of the streets elects a town representative who was responsible of handle all the developmental matters in the town. All the town representative of the towns elect a general body of the WASCO organization and this general body collectively elect a President, general secretary and finance secretary. These people were responsible for monitoring and developing all the infrastructural stuff. They opened an account by the name of WASCO Society and all the collection of the money and water bills were directly paid in that account.

Water and sanitation Agency (WASA-Lahore) developed external component which was totally funded by the Government of the Punjab and community develop internal component under the supervision and assistance of the WASCO. As the project developed successfully, all the infrastructure was handed over to WASCO by WASA. Now this community organization was responsible to supply water in the project area, maintain the sewerage system and disposal station, paying electricity bill to WAPDA, hiring the staff, paying their salary and office management. As in this project

community was fully engaged at each and every stage of its installation, construction, development and maintenance. Community also paid by money and time for the developing of internal component. They develop the sense of ownership and were much care about the operation and maintenance of the project. This was the dream of the community to have the WASH Facilities which come into real life with the self help and public private partnership.

4.4 COMMUNITY SATISFACTION WITH WORKING OF PROJECT

This Integrated water supply and sanitation project developed on the public private partnership. Due to actively involvement of the community in this project the dream of getting the WATSAN Facility comes into the real life. Community was satisfied with the services of the project.

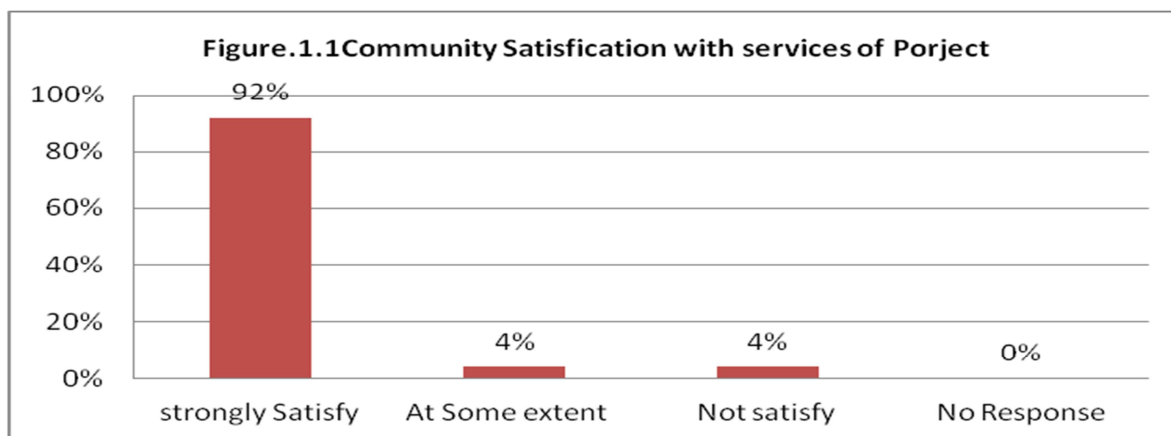


Figure 1.1. Community Satisfaction with Services of Project

Figure1.1 is showing the community satisfaction level with the project developed by them as taking part in the internal component .in this figure almost 92% beneficiaries of this project were fully satisfy with the working and efficiency, affordability and flexibility of the project. They were satisfied because all the developmental activities done with their involvement and now days they were running this project in the shape of WASCO.4% were satisfied at some extent and 4% were not satisfied with the project. these small line of the peoples were not so satisfy with the project services as some of them had double story house and some time the water pressure not in this position to reach at second or third story. Ultimately they had wish to take pressurized water even at Second or third story that was not some time possible due to the failure of Power supply. All the respondents respond very much and coordinate with the research team and there was not any single case of refusal.

4.5 COMMUNITY OWNERSHIP

Community takes part in the development of the internal component by effectively participation with the money, time. They were engaged in all the phases of the project planning, developing, implementation, monitoring& Evaluation, policy making and installment. Resultantly community attributed that this project was their own project as they were actively involved in all the major phases of the project.

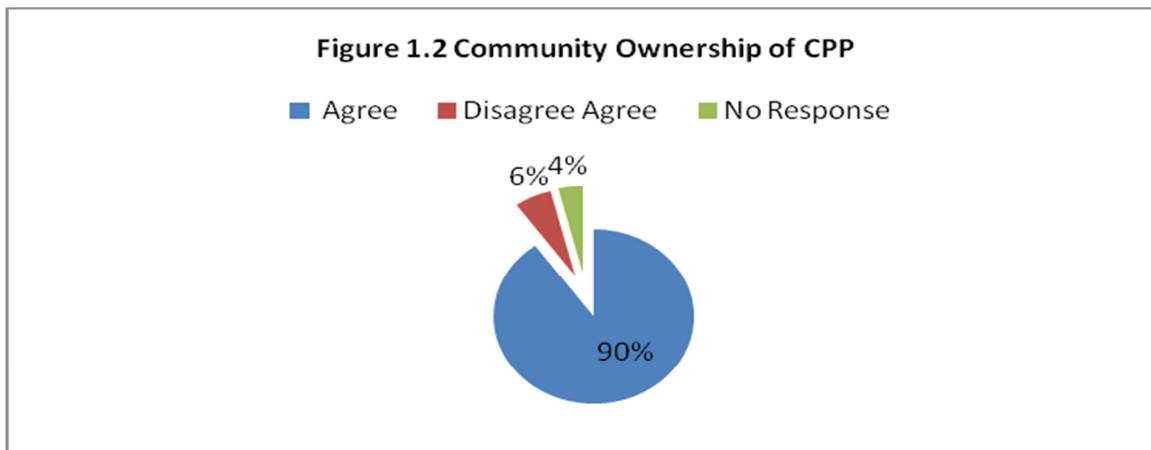


Figure 1.2. Community Ownership of Changa Pani Program

Figure 1.2 showing that almost 90% beneficiaries of the project determine and show their strong ownership about the project. This was due to their strong participation in internal component by financially, manually working and monitoring & supervision. When they always engaged in the every phase of the developmental activities and decision was taken with the community consent ultimately they develop and feel that this is their own property. So everybody take keen interest and care of his/her property, in this state community was so conscious about the project and own it at optimum level. Just 6% were not agreeing with the concept of the ownership as they attribute that this was the responsibility of the Government and they had provide us. They also reported that this was a Government project and ultimately that will be responsible for its future development. About 4% have not any opinion and response about this project's ownership matter.

4.6 REDUCTION IN COMMUNITY DISEASE LEVEL

Before the provision of water, sanitation and health hygiene facilities to the community of UC 60 Badar colony Lahore there was a high level of incidences of disease associated with poor drinking water and inadequate sanitation. Diarrhea, Gastro, abdominal pain, hair fall, malaria, cholera, Hepatitis (A,B &C) and skin disease were very high while children and old aged groups of local community were very effected and targeted of these diseases. After the provision of these basic services the benefices were determined that by the provision and developing of this project the people of UC 60 had developed their health profile and social status. These WATSAN facilities make optimum decrease level in the incidence of the disease in the area.

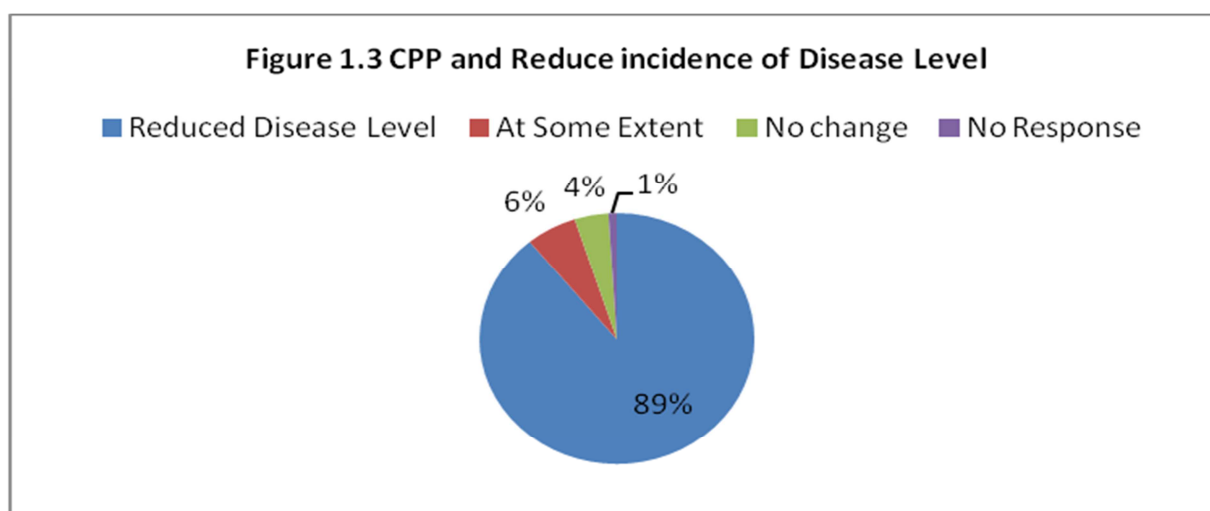


Figure 1.3. CPP and Reduction of Incidence of Disease Level in the Local Area

Figure 1.3 is showing that almost 89% respondents were attributing that this project play vital role in the decreasing the incidence of disease level from the area. They were attributing this as before the WATSAN facilities in this project area there was high level of the disease profile and many death occur due to the sanitation poverty and contaminated Drinking water. As with the development of this project now they had centralized sanitation system and pure drinking water. Now all the possible source of water contamination and fecal oral route were in controlled and there were much little consequences of the disease occurring rate in the project area. Whereas 6% said it reduce disease level at some extent, 4% respondents said this project had brought no change in reducing the disease profile and 1% respondent has no response about this matter.

4.7 IMPROVEMENT IN ENVIRONMENTAL CONDITION OF THE PROJECT AREA

Before the provision of WATSAN Facilities at Badar Colony it was very serious repulsion condition of the environment and this unhygienic condition of the environment posed much worse effects on the human health but With the provision of the water supply, sanitation and health hygiene facilities in the area it play important role in the improvement of the environmental condition and reduce its pollution level. Figure 1.4 showing that almost 78% Respondents respond were strongly agreed with efficiency and effectiveness of project and its role in the improvement of their environment by provision the underground water and sewerage system ,clean and neat streets and provision of health and hygiene education. They were attributing this because they faced much repulsion and disgusting situation about the Solid waste management and environmental hazardous before the launching this project. As with the provision of water supply, underground sanitation system there were very little chances of the water retention and staying in the street and make the surrounding environment much hateful. 9% were agree with it role at some extent.

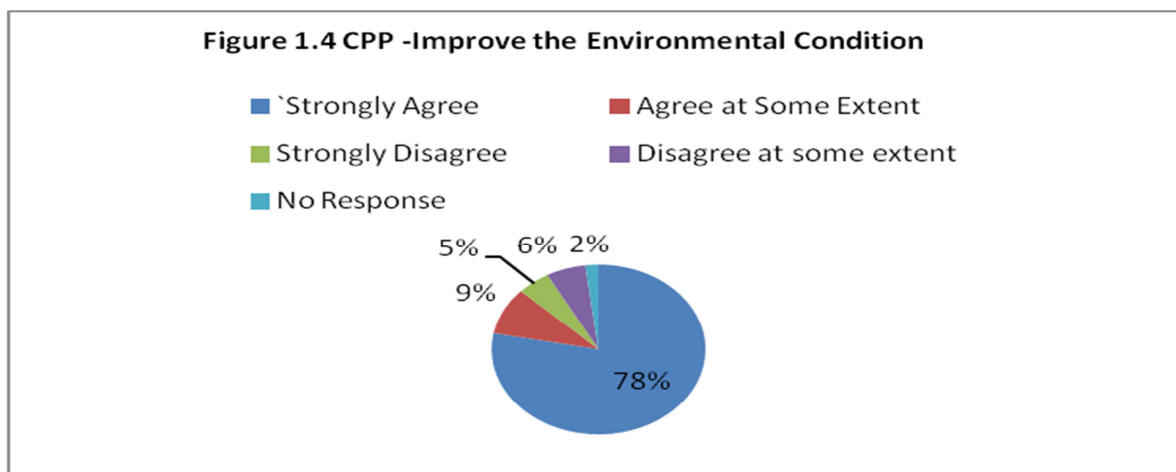


Figure 1.4. CPP and Improvement of Environment Condition of Local Area

These were agreed at some extent as the education level of the target area was much low and people did not know much about the importance of the clean environment. Whereas 5% were strongly disagree and 6% were disagreeing at some extent about the role of project in improvement of the environment of the project area. These people were doing disagree stuff as some people have a good surrounding environment already before the installation of the project in area so they were attributing this in a way because they had not much environmental problems near to their residence areas, especially the houses besides the Ranger Head Quarter. Ranger Head Quarter personals were very conscious about the Solid Waste which people drop on the street side due to the security reason, so they always keep clean and neat the boundary line of the Head Quarter .but almost 2% have not any opinion and response about this matter.

4.8 ENTRY POINT OF HUMAN DEVELOPMENT

As this project was developed in peri-urban area of the Lahore where there was not any facility of the water and sanitation before this project. Young, children, women and other aged people had to cover almost 2KM distance to fetch water for the domestic usages which take much of their time in this matter. There was great health driven burden on the community due to the contamination water and they had to pay a lot to treat their loved one .these matters were great hindrance on the way of their progress in the social economic status. With the provision of WASH Facilities by the developing of the CPP Project community was able to save money and time which they used to spend on the treatment of the disease

caused by the contaminated water utilization behavior. It play very important role in the improving of socio-economic status of the community.

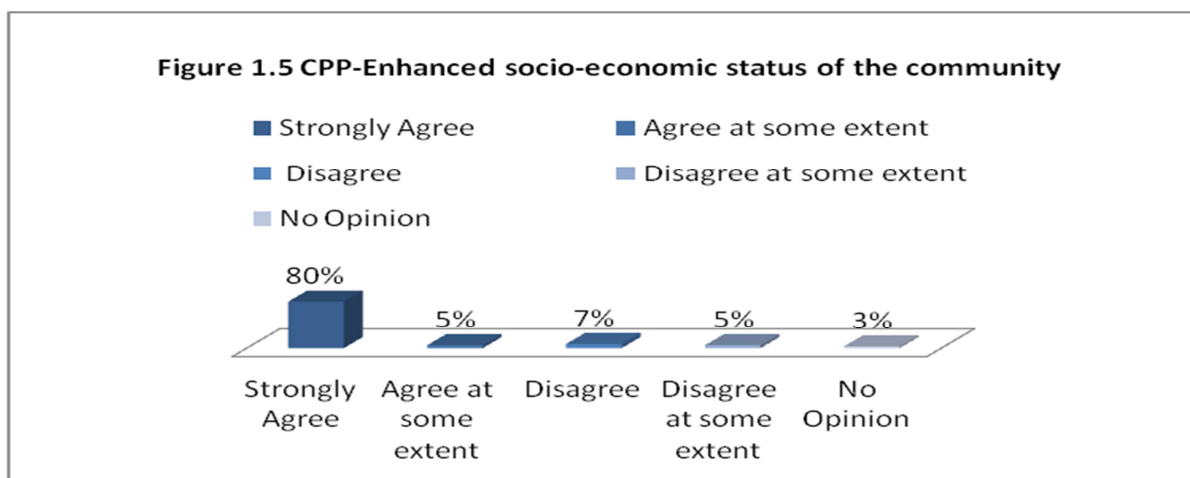


Figure 1.5. CPP and Enhancement of Socio-Economic Status of Local Community

Figure 1.5 showing that about 80% respondents were strongly agree with project influence in enhancing the socio-economic status of the community. People had to go at the Jury Pull for the fetching of drinking water. This was almost 2 kilo meter far from the project area. This job takes their time and some fuel as motor bike or car to carry water from the source. In other way there were a high rate of the disease profile in this area which of them mostly were water born, water related vector born disease. People have to spend more money in the treatment stuff. Environmental hazardous, soil and water pollution was another matter of concern. All such as issue make busy the community in earn and spend money on the health issues. With the provision of WASH Facilities in the project area people get rid of them and all the time which was being spend on the fetching of water , all type of money which were being spending on the health issues saved and community use this time and money in other their developmental activities . In the result ultimately community get social dignified status and save all the financial matter which were going to lose in health burden.5% were agree at some extent, 7% were disagree and 5% were disagree at some extent and were attributing that this project had a little bit any role in the enhancement of the socio-economic status of the community. These were those people who have some good economic status in the area and .they were enjoying life without WASH Facilities at door step .They used to make utilization of the common source of available water source and don't consider that disease were emerging due to the poor water and sanitation quality whereas 3% respondents were not any opinion and response in this matter.

4.9 WATER BILLS RECOVERY RATES

Many water supply schemes fail due to low rate of recovery of the water bills even the Governmental Agencies regarding Water, supply and sanitation as WASA failed to make its 100% recovery rate of the water bills. But this was surprising for all the service providing agencies of Water and sanitation as this program was developed in the much deprived and slum area where people were hardly making effort to find food for two times. They participate in this project and pay the water and sewer connection charges. And now were paying the water bills regularly on monthly bases which were 250 Rupees per month. They were reported that as we pay for the electricity, Sui gas and TV Cable bill, then why not we should pay for the safe and adequate water supply and sanitation facility in the area which is best safeguard of the health of our children and future generation.

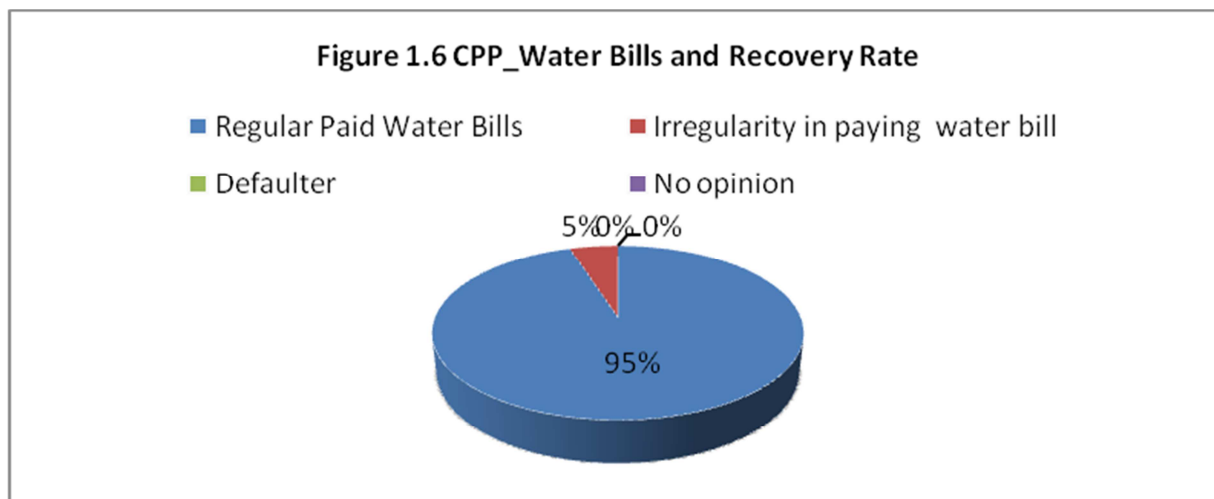


Figure 1.6. CPP and Water Billing and Recovery Rates

Figure 1.6 showing that almost 95% was paying the water bills regularly on monthly bases. This was almost all the people were paying their water and sewer bills regularly. Community was engaged in all the developmental phases of the project and even now project was running under the supervision of the WASCO that was purely community based and was a group of project clients. Monthly wise meeting arranged at WASCO Office and all the issue about water supply and sanitation come in to discussion. Decision was taken out with the consent of the community representative at street level. All the town and street water user group leader make ensure of paying the water bill on their concerning street and d town. If anyone not pays the water bills street leader asked to make it possible to pay the water bills by their town leader and in same way the town water leader was asked to make ensure 100% water bills in the town.

So in this way all the household try to pay water bills in time so that they cannot be asked to pay from their street or town water leader. So with this centralized monitoring and supervision system it was beautiful result that all the community makes use of paying water bills on monthly bases regularly.5% were paying bills but not regularly as due to economic matter. They paid bill after two month or sometime after a delivery date with the extras charges. There was not any defaulter or unpaid household beneficiaries of this project that is the beauty of this project.

5 EDUCATION IMPROVEMENTS IN THE LOCAL AREA

As before this project people were not in the position to send their child to school due to low economic status, Unavailability of the proper sanitation facilities on the some schools which hinder to teenage girls to go school. In rainy season streets of the project area filled with water and children were unable to go school even people were not able to go mosque for offering the prayer. But with the provision of this project's services almost many socio-economic and environmental issues were defeated. Community members were asked about the role of this project in the increasing the rate of school going child. They were reported that with the attaining the WATSAN Facilities and street pavements we are able to spend more time on jobs ,earn money, spent this money on our children for their education which was not possible for us before it. Now our children are able to move school even in the rainy season as we had not any issue of street dirtiness and poor WASH Facilities. This project increases the rate of school going children for getting education.

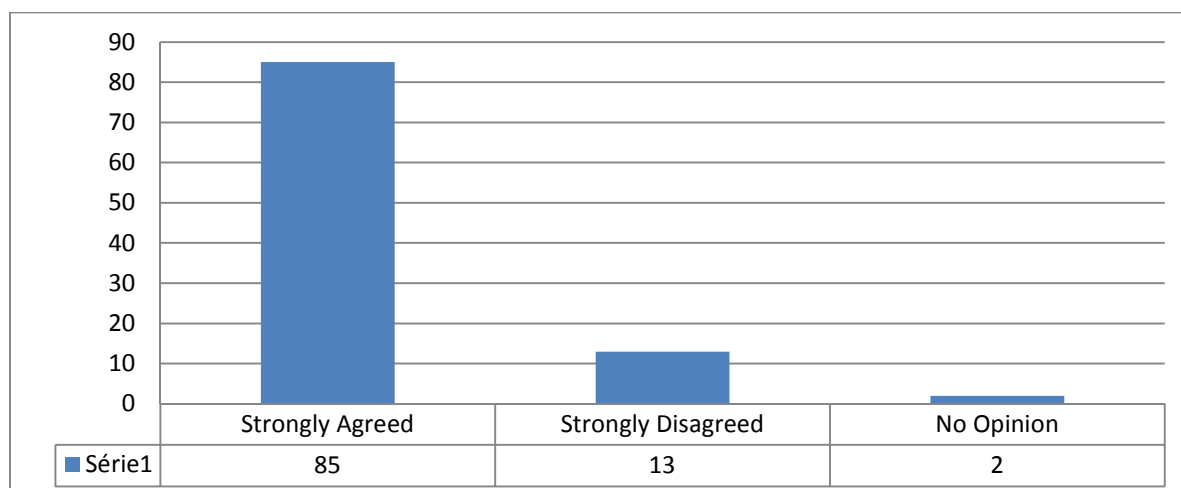


Figure 1.7. CPP and Increasing the Rates of School Going Children in the Local Community

Figure 1.7 showing that almost 75% respondent were strongly agree with the role of the project in accelerating the rate of school going child. There was very high rate of the disease in the project area due to the poor water and sanitation facilities, many people had to cover almost 2 kilo meter distance to fetch water for domestic use. This job makes waste lot of their time and money on the health treatment. When people get the Water, sanitation Facilities this save their time and money. This project makes their environment much clean and neat. it protect the soil erosion and pollution. Now street were paved. With the provision of the WASH Facilities now community members were able to move freely even in the rainy season. People have enough time to work and earn money, save money which use to spend on health driven. Now they were able to make much care of their off spring and get them go to school. Children were engaged in many child labor activities to support their family in winning the bread before this project. Now with access to clean drinking water and adequate sanitation system they were able go to school and get education and achieving the universal education for the all that is also a concerning of MDGs.10% respondents were agree with this statement at some extent.

Almost 9% respondents were not agreed with the role of project in acceleration of the rate of school child. These minute number of the people were looking the project with other aspects. They were attributing that we were not much financially able to send our kids at school in the past but now we are working and earning much money and are able make possible of our child education, but at the end they also reported that we were not healthy due to the chorionic disease in the area and reason of disease was poor water and sanitation facilities but now we had get this and also saving money which we use to spend in electricity bill as we use motor pump for sucking underground water for our domestic uses. As we are getting water at door step and doing no more use of motor pump it help us in living happy without any water born or water related disease and saving money, eradication of poverty and achieving the child education whereas 2% respondent of the area have not any opinion and response in this matter.

5.1 COMMUNITY SATISFACTION WITH THE WORKING OF THE WASCO

A water and sanitation community committee was established in the project area based on the community member and this committee was elected by the community. This committee was responsible to take over the project after all the project's infrastructural development and handle all the matter of water supply, sanitation, water billing, recovery, office management, staff paying with operation and maintenance of the project. After the successfully completion of the project community was asked about the working quality and transparency of the WASCO Committee. A huge number of the respondents were fully satisfied with the working and services of the WASCO.

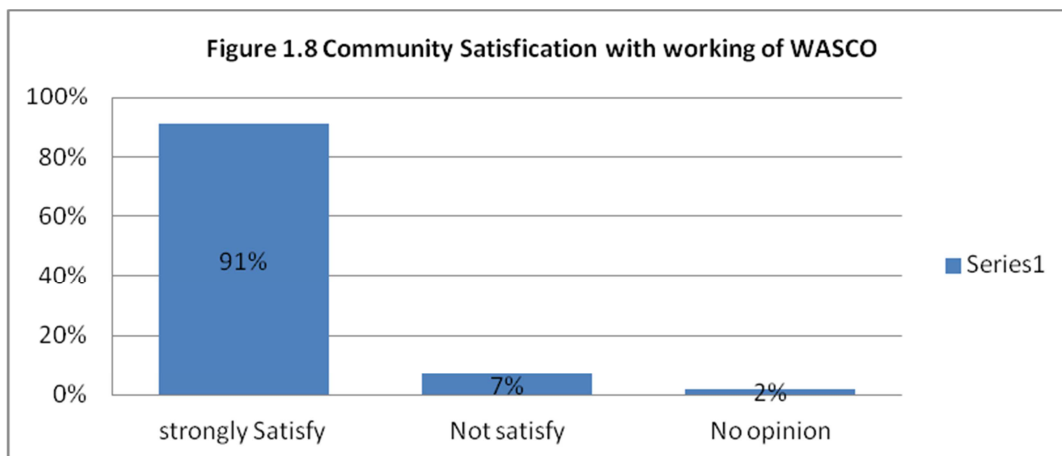


Figure 1.8 Community Satisfaction with Working of WASCO

Figure 1.8 Showing that almost 91% Respondents were strongly satisfy with the working efficiency and effectiveness of the WASCO. This was as because this committee was formulated by the community and even all the streets Water and sanitation representatives were involved in it. These street representatives were also elected by the consent of all the household of the streets. All the members were responsible to make all the phases of the project pure form the embezzlement and an openly transparent transaction of the money form the account of WASCO to buy any things for the Project. , 7% were not satisfied with its working. Some of these people were not attending the weekly and monthly meeting as were working as a government servant. They used to remain busy with their job and family and not much aware of the working updates of the WASCO. And 2% respondent had not any opinion and response about this matter.

6 CONCLUSIONS

This project was an integrated water and sanitation services which developed on the philosophy of Component Sharing model which divided into two major External & Internal component. There were four partner of the project. Government of Punjab, Urban Unit P&D Department, City District Government and Anjuman Samaji Bahbood (ASB) .all the partners of the Changa Pani program had completed their responsibilities and played an effective role in the completion of this program. Project was 100% completed successfully in the time frame. Community participate 39% cost of total project which collected and distributed by the community for the developing of the internal component. Now WASA-Lahore had handover this program to the local community committee named WASCO and WASCO is striving to complete its responsibilities for solving all the maters regarding the water, sanitation and maintenances of the project assets. Women were much active in the developmental activities of this project. They play vital role in the influencing to their men and family members to participate in the project. People were satisfied with the services and working of the Changa Pani Program. Some people have a complaint regarding the water pressure. They were saying that water comes with the low pressure and some time with a speedily. It has some technical issues in the water supply management system due to failed of electricity power which some time be a reason of the cracking the small water supply lines. And people had to face critical problems regarding the water supply. There was a great level of the integration between the local community committees at and they are fully enthusiastic for generating a positive change in the condition of their area for having the facilities of the dispensary, park, Govt School and better road system surrounding this area.

6.1 CRITICISM

This project was aimed to supply water at 24/7 days with water meter. But unfortunately there was not any consumer water meter by which it could be monitored. Community was delivered fixed monthly bills amount of 250 Rupees. That was many time dishonesty and discrimination against some peoples of the project area. Some people have family size 3-4 but most of others have above 7 people per household. Some people use water for their domestic purpose but most of them use this water for the washing the floor, vehicles and have multistory homes. Some people use water with very small quantity but some do it in more but all the water users were paying the fixed bill with no regards of the water utilization behavior. Most of the time water was not managed at household and it was wasted carelessly while Such as behavior led to wastage of freshwater resources. There was not any type of the water conservation, water measurement and make preserve

for the future generation. People were paying fixed monthly bills and using water as much as they want which is against the principle of the Sustainability.

6.2 SUGGESTION & RECOMMENDATIONS

There are some suggestions concerning this program which is given below.

- There should be construct at least one or two dispensary for this community and doctors must be engaged in the WASH Activities.
- Government should launch such as program with the involvement of the local community.
- Women must be involved in the community developmental project
- Women water leader and women water user group strategies should be adopted in the all the WASH Development projects
- There should be established monitoring team or committee for check and balance the performance of the WASCO.
- Such as program should be launched as well as develop in the neighbor areas the badar colony.
- WASA Lahore should be involved in this program and work with the WASCO and give it technical assistant permanently.
- Water meter must be installed.
- The more researches should be done on such as program to attain the accurate knowledge about the process as well as outcomes of the projects.
- Community involvement program should be proceeding so that we can meet MDGs successfully. And attain the environmental protection.
- Community driven and public private partnership model should be refined and a firm policy should be developed for sustainable WASH Development.
- Mobilization and strong cohesion should be enhanced within local communities & line departments which are responsible for the infrastructure, building, housing and WASH development in Pakistan.

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