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## Community health revolving fund: Equity fund for MCCS

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Community health revolving Fund: Equity fund for MCCS

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Final Strategy Document

**Muhammad Ashar Malik**

**3/15/2014**

**Child Health for the Mother Care and Child Survival Project in Underserved Regions of Mali, Mozambique and Pakistan Project 2011-2015. This report is the final deliverable referred at item IV of the Term of Reference of the consultancy agreement between Aga Khan University, Karachi and the Aga Khan Foundation, Islamabad to develop healthcare financing mechanism for Maternal, New-born**

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## List of Acronyms

ADP	Annual Development Program
AKDN	Aga Khan Development Network
AKF	Aga Khan Foundation
AKHSP	Aga Khan Health Services, Pakistan
AKRSP	Aga Khan Rural Support Program, Pakistan
AMBC	Assurance Maldie a Base Communautaire
ANC	Antenatal Care
BEmONC	Basic Emergency Obstetric and Neonatal Care
BISP	Benazir Income Support Program
BoD	Board of Directors
CAD	Canadian Dollar
CBA	Child Bearing Age
CBSG	Community Based Saving Group
CCSP	Chitral Child Survival Project
EmONC	Emergency Obstetric and Neonatal Care
CH	Civil Hospital
CHRF	Community Health Revolving Fund
DHQ	District Headquarters Hospital
DHS	Demographic and Health Survey
DoH	Department of Health
EmONC	Emergency Obstetric and Neonatal Care
FHC	Family Health Center
GB	Gilgit Baltistan
GMC	Gilgit Medical Center
HMI	Health Micro Insurance
IMR	Infant Mortality Rate
LSO	Local Support Organization
MCCS	Maternal Child Survival Project
ME	Medical Expenditure
MMR	Maternal Mortality Ratio
MNCH	Maternal Neonatal and Child Health
NRSP	National Rural Support Program
OOP	Out-of-Pocket
PBL	Pakistan Baitul Mal
PKR	Pakistani Rupee
PMT	Proxy Mean Testing
PNC	Postnatal Care
PWR	Participatory Wellbeing Ranking
RHC	Rural Health Centre
SEWA	Self Employed Women's Association
SIS	Socio-economic Impact Survey
SMC	Singal Medical Center
SSC	Sehat Sahulat Card
TDR	Term Deposit Receipt
TE	Travel Expenditure
THE	Total Health Expenditure
WO	Women's Organization

## Executive Summary

Gilgit Baltistan is inhabited by roughly 1.5 million people as of the year 2013. Since 2009, this region has the status of self-governing body of the federal government. It has mountainous topography with very low population density. Fewer economic opportunities and inaccessibility are the major cause of slow economic development. Health status of the population is also poor. For example the Maternal Mortality Ratio in GB is 600 compared to the 272 national average of Pakistan.

Health sector in GB comprises public and the for-profit and not-for-profit private healthcare financing and healthcare delivery systems. Aga Khan Development Network (AKDN) provides healthcare to the population of Gilgit Baltistan on not-for-profit principles. The Aga Khan Foundation (AKF) in Canada is executing three years Mother Care and Child Survival (MCCS) project (2011-2015) to improve the maternal and child health in the target areas. One of the components of the project is the development of a pro-poor financing mechanism to provide financial protection against out-of-pocket health expenditure shocks to availing MNCH services.

This report provides a detailed pro-poor financing mechanism for MNCH services in the region. The report is divided into four sections. The first section provides the methods applied to develop the proposal. Second section provides findings of literature review, stakeholder consultation and data analysis. Third section provides a framework of the pro-poor financing mechanism called Community Health Revolving Fund (CHRF). This includes the scope, structure and features of the scheme. In section four of this report, an implementation plan developed by the implementing agency of the pro-poor financing mechanism, Aga Khan Rural Support Program (AKRSP), is provided.

The literature review revealed that most health financing schemes tend to be offered to whole families and MNCH services tend not to be included. We did not find any scheme exclusively covering maternal and child health. Most of the schemes have coverage of 10% of their target population and these schemes were offered on a voluntary basis. These schemes did provide coverage to the poor but the poorest were often excluded.

Public health system in Gilgit Baltistan is similar to the rest of the country in terms of structure, functioning, financing and delivery. The Department of Health (DoH) of Gilgit Baltistan (GB) has network of 486 health facilities and preventive and vertical primary healthcare programs. Aga Khan Health Services Pakistan (AKHSP) is an extensive network of primary and secondary healthcare services in GB and Chitral. There are 32 health facilities in GB and 34 health facilities in Chitral. The Aga Khan Health Service charges a user fee. Recently the DoH GB has also introduced users' fee for services at government health facilities. Out-of pocket (OOP) health expenditure including medical and travel expenditure,

is high in the Gilgit region. The health expenditure as percentage of household total expenditure in Gilgit and Baltistan was around 10% in 2008.

The pro-poor financing mechanism aims to provide financial protection against OOP health expenditure. The target population of the scheme is married women of child bearing age and children under-5 years of age. Married women of child bearing age, estimated deliveries and population under one year of age in the four target districts (Gilgit, Hunza-Nagar, Astore and Ghizer) are 104352, 15261 and 15653 respectively. The project would be targeting the poor and ultra-poor population that is around 34 % of the population. The ultra-poor are 5.5 % of the total population in Gilgit Baltistan.

The package of services includes some basic and a few comprehensive Emergency Obstetric and Neonatal Care (EmONC) services. Community and first level of health services include antenatal care and normal delivery and neonatal care; while secondary care services include managing complicated delivery including Cesarean section at secondary care hospitals in the region. The package would cover four antenatal visits, normal or complicated delivery and three postnatal visits. Travel costs would be included and would be worked out by the community organizations using the cheapest locally available transport facilities. Based on the user charges of the AKHSP health centers in GB, the cost of this service package would be in the range of PKR 10200 and PKR 25500.

Using the target population estimates, the financial implications are presented for one LSO covering a population of 10,000. The target population would be 1600 married women and 234 expected deliveries each year in one LSO. To meet the entire MNCH demand of the target population PKR 2.7 million would be required. The project would be implemented in population covered by 15 LSOs in these districts. It would provide coverage to a population of 0.15 million. Financial protection would be provided to 3510 obstetric deliveries. The MNCH needs and the cost implications for only the poor and ultra-poor are estimated separately. Assuming 34% poverty incidence in the year 2013 and 5.5% incidence of ultra-poor in Gilgit Baltistan, all types of obstetric deliveries for all poor families are estimated as 4659. The cost of these deliveries is near to PKR 50 million for one year.

A financial mechanism to protect against OOP health expenditure should be economically viable and feasible. Economic arguments for insurance mechanisms suggest that the ex-post aggregate benefit of the insured population equals the ex-ante aggregate financial contribution. Unlike the uncertain nature of many healthcare needs, MNCH needs can be ex-ante determined. This requires an approach different from insurance. At the community level participation in such a scheme would require that people should consider the externalities of maternity and child health for the community. If MNCH needs are not fulfilled in timely manner, this would have negative external effects on the entire

community. Moreover, the aspect of profit in any MNCH financial protection scheme would discourage community efforts to avoid negative externalities.

The pro-poor financing mechanism would be based on two principles: firstly, the positive externalities and altruistic preferences of the community to implement this scheme; and secondly, the not-for-profit nature of the scheme would encourage participation in the scheme through low premiums as compared to competitive market rates. The objective of the scheme would be to improve maternal and child health by removing financial barriers to access to health services. The scheme would be inclusive of the poor and ultra-poor and would be exclusively for MNCH services.

A community level revolving fund of nearly PKR 1 million would be established in each Local Support Organization. Initially the program would be piloted in 15 LSOs in the target districts. Fifty percent of the fund would be placed in term deposit and the remaining 50% would be offered as soft loans to families to meet the cost of MNCH services. The interest would be 5% for the ultra-poor and 10% for the poor. The non-poor could also avail the loan at a market interest rate of 15% for their MNCH needs. Moreover an additional emergency fund would be established at the level of women's organizations (WOs). This emergency fund would be used to provide timely emergency MNCH needs of the population.

The community health revolving fund would be managed by Local Support Organizations (LSOs). The emergency fund would be managed by the Women's Organizations (WOs). Though there would be independent funds for each LSO, the risk pooling principle would be consistent across the region in that the services package, interest rates and eligibility criteria would be the same in all districts.

The community would identify the poor and ultra-poor families through Participatory Wellbeing Ranking (PWR) and would validate this ranking with other methods adopted by social safety nets in the region such as the Benazir Income Support Program (BISP) and Zakat program.

The scheme would be overseen by a regional level committee comprising members from Aga Khan Rural Support Program and Aga Khan Health Services program in Gilgit Baltistan. The committee would monitor the activities of the scheme and would ensure the different mechanisms of eligibility are similar across the region. The scheme would be initially offered in 15 LSOs and would be extended to the entire region upon successful evaluation of the scheme and availability of resources.

The proposed health financing mechanism would rely on the approach of community organization for financial contribution and would be supported by significant contributions in the form of funding, health system strengthening and health promotion and nutrition intervention of the MCCS project. It is expected that this scheme would contribute to improved maternal and child health in Gilgit Baltistan region.





## Introduction

Gilgit Baltistan is inhabited by roughly 1.5 million people as of the year 2013. It is stretched over an area of 72,496 square kilometers in 7 districts with Gilgit being the provincial capital. Gilgit Baltistan was previously a special area of Pakistan and was known as Northern Areas of Pakistan. It was granted self-governing status in 2009 by the federal government of Pakistan. Since then a legislative and administrative government has been formed in GB on loosely modelling other provincial governments of Pakistan.

The region is characterized by harsh weather conditions, inaccessibility and remoteness to the rest of the country, poor economic activity, and fewer market activities. The population density is very low i.e. around 12/SqKm.<sup>1</sup> This is coupled with strategic geographical location and sensitive political environment of the region. The area has immense natural resource potentials and is located on one of the oldest trade routes: the Silk Road (and currently the Karakorum Highway). The region is lagging behind the overall economic, political and social development of the rest of the country.

Health status of the people of GB is even lower than many areas of mainland Pakistan. Progress on health outcomes is hampered by harsh climate conditions, mountainous topography and poor access to health facilities within the region and other parts of the country. For example the Maternal Mortality Ratio in GB is 600 compared to the 272 national average of Pakistan. A comparison of GB and national average of health indicators in Pakistan from Pakistan Demographic and Health Survey 2012-13 and National Nutrition Survey 2011 is given in the table below.<sup>2, 3</sup>

**Table1: Gilgit Baltistan Health profile 2012-13**

Indicator	Gilgit Baltistan	Pakistan
Maternal Mortality ratio	600	272
Infant Mortality rate	92	61
Under Five Mortality rate	122	94
Percentage with antenatal care with a skilled provider	64%	73%
Percentage deliveries with a skilled provider	44%	52%
Percentage of children aged 12-23 months who received all basic vaccinations	47%	54%
% of children with ARI and who sought treatment)	84.4%	54.6%

% of children with fever and who sought treatment)	78.1%	52.7%
% of children with diarrhea and who sought treatment	75.8%	41.8%
Maternal anemia <sup>3</sup>	33.60%	51%
Anemia in children under five <sup>3</sup>	41.00%	62%
Sever vitamin A deficiency in pregnant women <sup>3</sup>	20.00%	18.70%
Exclusive breastfeeding in first six months <sup>3</sup>	14.5%	12.9%

Source PDHS 12-13 & NNS2011

Maternal, neonatal and child health (MNCH) is the most compromised healthcare need in the region due to multiple factors stated above, albeit poverty remains the key challenge to prioritizing the demand for MNCH services to the other needs of the household such as food, energy, education and socialization etc. The health sector in GB comprises public and the for-profit and not-for-profit private healthcare financing and healthcare delivery systems. AKDN provides healthcare to the population of Gilgit Baltistan on not-for-profit principles. It supplements the efforts of the GB government to meet the healthcare needs of the population through collaborative efforts as well as through its own network of primary and secondary healthcare facilities in the area.

## Maternal Care and Child Survival Project

AKF in Canada is executing a three year Maternal Care and Child Survival (MCCS) project (2011-2015) to improve maternal and child health in target areas with multiple interventions in underdeveloped and marginalized communities in Mali, Mozambique and Pakistan. In Pakistan the MCCS project is being implemented in four districts of GB region Gilgit, Astore, Hunza-Nagar and Ghizer. The MCCS project was designed with the objective of improving MNCH indicators of the region. The interventions of the project are improving access and financial protection for the poor and the ultra-poor in the four project districts. The project is built on strong evidence from multi-country studies that community based healthcare financing coupled with supply side interventions have improved access to maternal and child health services and decreased catastrophic expenditure on maternal healthcare.<sup>4</sup> The MCCS project interventions providing timely access to MNCH services are a public-private partnership (PPP) model and activities include revitalizing and strengthening existing health facilities and out-reach activities. The health care financing intervention aims to provide financial protection against health expenditure on the MNCH related services by including the poor and ultra-poor households.

## Pro-poor Financing Mechanism

The establishment of a pro-poor healthcare financing mechanism is a key component of the MCCS project in the target areas. This mechanism will attempt to improve access to MNCH services in the region by removing financial barriers. This report is an outcome of the consultancy to develop a pro-poor financing mechanism in the four districts of Gilgit Baltistan. The following part of this report is divided into four sections. Section one provides the methods applied to develop the proposal. The methods largely rely on secondary data analysis techniques comprising literature review, situation analysis and analysis of quantitative data.

The second section provides findings of the report. Findings are grouped into three parts; firstly, findings of a thorough literature review of community based healthcare financing schemes are provided. This is followed by features of key stakeholders in the health and social and development sector. Last but not the least, the data analysis section covers identification of the target population, demand for MCH services, poverty analysis, services package, cost of services package, and financial analysis of the pro-poor financing mechanism.

The third section provides a framework of the pro-poor financing mechanism titled 'Community Health Revolving Fund' (CHRF). This includes the scope, structure and features of the scheme. In section four of this report, an implementation plan developed by the implementing agency of the pro-poor financing mechanism is provided. The implementing agency for the scheme will be the AKRSP.

## **Methodology**

This report relies on three sources of data. Firstly, a literature review was carried out. The objective of the literature review was to document and analyze key aspects of community based healthcare financing schemes in local, regional and international contexts with respect to MNCH needs. Secondly, wider stakeholder consultations were held in GB. The objective of these consultations was to understand the health system and review approaches to establish social protection nets at the community level. Lastly, analysis of secondary data was carried out to define the target population and MNCH related healthcare needs. In the following section the details on these methods are provided.

## **Literature Review**

The literature review mainly focused on the design aspects of community based healthcare financing schemes, mapping of the poor through qualitative and quantitative methods and long term sustainability and extent of coverage of the community based health financing schemes in developing countries.

A literature search was carried out on Google Scholar and Pub-Med in the month of August 2013. The selection criteria included peer reviewed scientific literature containing quantitative and qualitative analysis of community based health insurance in developing countries. The search terms used were 'community based health insurance', 'developing countries', 'micro health insurance', 'financial protection', 'SEWA', 'Burkina-Faso', 'Grameen Bank' and 'maternal and child health'. Literature included in this review is not older than the year 2000.

## **Stakeholder Consultation and Field visit**

Stakeholder consultations were held in the month of October 2013 in Gilgit, Hunza-Nagar and Astore districts. The objective of these consultations was to present key aspects of the proposed scheme to the participants and to build consensus among the primary and secondary stakeholders of the proposed project. The primary stakeholders were the communities who will ultimately benefit from the scheme. The secondary stakeholders included the representatives of the GB department of health, healthcare providers of MNCH services in the area, the MCCS project staff and representatives of the community organizations working in the area.

Through consultative meetings and visits, data was collected from the officials from the DoH of GB, AKHSP and AKRSP regional offices in Gilgit, and officials of the MCCS project. The Local Support Organizations (LSOs), Women Organizations (WOs) and Village Organizations (VOs) in districts Gilgit, Ghizer, Astore and Hunza-Nagar were consulted for their knowledge and experience with the healthcare financing approaches and strategies. The list of individual and organization consulted and the proceedings of these consultations are available in the annexure-1.

## **Secondary Data analysis**

Secondary data was collected on socio-economic status, health seeking practices, health systems and financing in the GB region. An expert panel comprised of individuals from Aga Khan Foundation (AKF), Aga Khan Rural Support Program (AKRSP), Aga Khan Health Services Pakistan (AKHSP) and Aga Khan University (AKU) Karachi helped identify and provide access to data and archives related to key healthcare providers and financial protection schemes.

The data analysis relied on secondary data from the Demographic and Health Survey (DHS) 2008 for GB and Pakistan DHS 2012-13,<sup>2</sup> World Bank Economics Report of Gilgit Baltistan 2011<sup>5</sup> and Gilgit Baltistan Socioeconomic Impact Survey, 2008.<sup>6</sup> The Aga Khan Rural Support Program (AKRSP) provided selected data from the GB SES 2008 data set. This data was analyzed for income and health expenditure by the region as defined in the data set, by types of health expenditure i.e. direct health expenditure and travel cost. The National Census data for Gilgit Baltistan for the year 1998 was utilized to estimate population

projections for children under-five and estimate the number of deliveries in project district of GB. The same population projections were used to estimate the percentage of the population living below the poverty line based on the GB SES 2008<sup>6</sup> estimates as these were the most recent poverty analysis available for the region. National and international data on MNCH related services such as number of expected mothers, percentage of normal obstetric deliveries and C-sections, and percentage of live births was collected to estimate demand for MNCH related healthcare services in GB.

## **Findings Part 1: Literature review**

The findings of the literature search provide a review of key micro-health insurance and social protection schemes at global, national and regional levels. This is followed by the evidence synthesis on key aspects of the community based healthcare financing schemes.

### **Review of healthcare financing mechanism**

#### **Region of Gilgit Baltistan**

Two key health insurance or financial protection schemes operational in GB are reviewed below. Firstly, the Family Health Insurance Program and second the Community Based Saving Groups in Chitral.

#### **Health Micro Insurance (HMI) program of Jubilee Life Insurance**

Designed and implemented by the Aga Khan Agency for Microfinance (AKAM) with support from the Bill and Melinda Gates Foundation, the HMI was launched in the northern areas of Pakistan in 2008. Jubilee Insurance initiated health insurance in three districts of GB: Hunza-Nagar, Ghizar and Gilgit. The upper limit for reimbursement of health expenditure was PKR 25,000 per year for new member families and PKR 30,000 for the renewal of the package annually.<sup>7</sup> To accommodate higher costs of health services in Gilgit District the upper limit was further extended to a PKR 35,000 for the clients from Gilgit District. The premium was PKR 2000 for a family with up-to five family members. The premium was PKR 300 for any additional member. The benefit package mainly included hospitalization, free annual medical checkup vouchers and life insurance for the head of the family.<sup>8</sup> Jubilee Insurance's current enrolment for the HMI program is 7000-7500 families and around 40,000 individuals. The program is marketed through the community organizations and activists of the AKRSP. It pays PKR50 to the activist and PKR25 to the Local Support Organization (LSO) for each family enrolled for the family health insurance.<sup>9</sup>

The reimbursement entitlement excluded suicides, mental health and substance abuse, cosmetic surgeries, dental care, day surgeries. Non-healthcare costs associated with health seeking such as travel and food was also excluded from the reimbursement policy. Maternal

health was initially part of the reimbursement policy but it was later excluded due to high claim ratio (450% according to company's spokesman).<sup>10</sup> MNCH coverage included institutional based deliveries, four antenatal care visits and one postnatal care visit. An independent review of the project was done in 2010 which identified a range of aspects of the scheme in Ghizar district. The key aspects of the review were 1) financial landscaping, 2) healthcare landscape and 3) consumer perspective. This review revealed that enrolment to the scheme was much less than expected. This was partly due to the marketing strategy that relied heavily on the local community organizations. The review report also identified enrolment was largely dependent on geographical proximity of families to health facilities, being enrolled in a preexisting program, being elderly or pregnant and a regular income earner within the household. It identifies that outer income bands i.e. the rich and ultra-poor, large/joint families and families already enrolled in other programs such as armed forces personnel etc. did not participate in the scheme.<sup>7</sup>

### **Community based saving groups of Mother and Child Survival Project in Chitral**

The Chitral Child Survival Project (CCSP) was started in 2008 in Chitral District of Khyber Pukhtonkhwa (KPK) province. The project developed a scheme known as Community Based Saving Groups (CBSG) from 2008-2014 to provide financial assistance to families to meet the cost of obstetric deliveries and other related illness. The membership of this program was extended to women of reproductive age. The groups were empowered to develop their own constitution, savings amount, service charges and interest on loans. The leftover of saved amount was to be distributed according to the contribution or rollover to the next cycle year. The project developed more than 400 such groups in 28 villages in the Chitral district. Members of the group were offered shares of PKR 10. Each member could buy 1-5 shares in a week or two.<sup>11</sup>

The project has shown success in terms of improved utilization of maternal and child health services by the CBSG members. The scheme operated alongside a parallel intervention for health system strengthening to cope with the challenges of maternal and child health. It established a strong referral system and presumptive shifting of birth risk factors to the community midwives (CMW).<sup>12</sup> This model follows a savings and loan mechanism. If interest is charged on the loan extended to meet the cost of maternal and child illnesses then families are prone to become trapped in poverty if the loan is not recovered in time. The major challenge of the scheme is that most of the women in the area have unreliable sources of income and they mostly depend on the income of their spouses. Furthermore, risk pooling is insufficient if confined to the village level.

### **National Level**

There has been a rapid growth of micro health insurance schemes in Pakistan. Health insurance schemes include, inter alia, the National Rural Support Program (NRSP), private

health insurance schemes, Pakistan Bait-u-Mal (PBM) and Zakat for medical expenses and health insurance in the Benazir Income Support Program (BISP). The criteria to select schemes for the review were based on nature and scalability of scheme, relevance to rural and inaccessible populations and targeting the ultra-poor. Only three schemes were picked for this review i.e. Naya-Jeevan, Waseela-e-Sehat and Zakat and Bait-ul-Mal schemes for medical expenses.

### **Naya Jeevan Health Insurance, Karachi**

Naya Jeevan, is a not for profit organization working in the area of social protection. It focuses on health insurance to the most vulnerable and marginalized communities at Sultanabad, in Karachi. It has engaged three private insurance companies in Karachi for risk pooling of its clients. It has three major schemes of health protection. The corporate model of health insurance offers health insurance for low-income employees in the corporate sector. The school model offers health insurance to school children. The community based health insurance is offered in Sultanabad to the poor communities. In all of the schemes of Naya Jewen the approach is subsidization from the rich to the poor. Corporate employers, school children and individuals can volunteer to finance the premium of health insurance for the poor and vulnerable families. The benefit packages mainly include financial protection against health expenditure on hospitalization. The premium and coverage features slightly vary between these three plans.<sup>13</sup>

In case of corporate employees' health insurance, the upper limit of entitlement is usually PKR 150,000/person/year and the annual premium is PKR 1800/person/year (i.e. PKR. 150/person/month). Including maternity services increases the premium by PKR.50/person/month. For children, health insurance (offered in the education sector) the upper limit of entitlement of the benefit is usually PKR 75,000/person/year for children and the premium is PKR 1200/person/year (PK 100/child/month). The community health insurance program in Sultanabad provides coverage up to a limit of PKR 100,000/person/year. The service package includes maternity services and provides a 50% discount on outpatient services. The annual premium is PKR 1800/person/year (PK 150/person/month).<sup>14</sup>

### **Waseela-e-Sehat of Benazir Income Support Program**

The Benazir Income Support Program launched the MHI Scheme known as Waseela-e-Sehat to the population living below poverty line. A cashless 'Sehet Sahulat Card (SSC)' is issued to the eligible family to be verified and charged at the designated health facilities. The insurance coverage would be provided in collaboration with State Life Insurance Corporation. The scheme provides coverage up-to PKR 25,000 per family per year. It also provides PKR1,500 per week to the family for lost earning of bread earner. The coverage includes all inpatient services, day care surgeries and normal deliveries and complicated deliveries requiring C-Section.<sup>15</sup> The scheme is being piloted in Faisalabad district with a plan



to enroll 50,000 eligible families. As of November 2012, the scheme has issued 37,585 Sehat Sahulat card. Under the scheme 3,392 outpatient and 506 inpatient cases have been reported in eight BISP panel hospitals in six Tehsils in the district.<sup>16</sup>

### **Zakat and Baitul Mal for Healthcare Need**

Pakistan Baitul-Mal (PBM) provides financial assistance on first-come first-serve basis for the poor to meet their healthcare cost in case of major illness and disabilities. The eligibility criteria include an income below PKR.10,000 per month besides other criteria such as disability, widows and orphans etc. The maximum limit of financial assistance is PKR.600,000 to individuals. Financial assistance is available in the form of reimbursement to the healthcare providers only. In the year 2011-12, there were 8651 beneficiaries provided financial assistance of PKR713 million in Pakistan including GB region.<sup>17</sup> Zakat is a similar to PBM yet its entitlement is restricted to Muslims only. It provides assistance to the families eligible for Zakat assistance according to Islamic Sharia Law. The need assessment criterion in case of Zakat and PBM is loosely defined and depends on Tehsil and Union Council based administration of these funds.

### **Region of Indian Sub-continent**

The review of schemes in the rest of Indian sub-continent included two best practices that are summarized by the researcher. These include health insurance program of Self-Employed Women Association (SEWA) in India and the health insurance offered by the Grameen Bank.

### **Community-based Health Insurance Program of Self-Employed Women Association (SEWA) in India**

Self-Employed Women Association (SEWA) in India started an insurance scheme in 1992 covering life, assets and hospitalization (but not transportation). The key feature of the scheme was its voluntary nature, focus on women (members/non-members of SEWA) and their families. SEWA operated as an agent charging Indian Rupee (IR).5 (from non-members) per premium collected on behalf of a formal insurance company with the coverage of maximum of IR 2000 per member per family. SEWA charges premium of IR.85 per woman and an additional IR.55 can be paid for insurance of her spouse. Currently there are more than 20 such health insurance schemes in India.<sup>18</sup> Another important aspect of the SEWA health insurance scheme that it determines the premium based on the ability to pay of the client. It does not a charge flat rate premium. This helped the scheme to be pro-poor. Equity was insured by two markers: the membership should include more than 30% of the lowest three SES deciles and more than 50% should be women. Evidence suggests that 32% membership in rural areas and 40% membership in urban areas belong to the families of lowest three deciles of SES.<sup>19</sup>

### **Micro Health Insurance Scheme of Grameen Bank (GB): Grameen Kalyan**

Micro health insurance was a supplementary service of the Grameen Bank (a micro credit financial institution) in Bangladesh. It was introduced in late 1990s to Bank clients. It was built on the rationale that the benefit of microcredit cannot be reaped fully; for instance in the case of catastrophic health shocks. Micro health insurance was offered on voluntary basis to GB members and non-members living within the 8 kilometers of a health center. The package of services includes an annual basic checkup for the head of the family, free immunization, free domiciliary visits by health workers and hospitalization coverage of up-to Bangladeshi Takka (TK) 2000 per annum per family. On other services, the coverage offered a cost sharing of TK10 for card holder and TK25 for non-card holder for the every outpatient visit. With regards to medicine and pathological test, the coverage included a 25% and 30—35 % discount on retail price respectively. The obstetric deliveries and antenatal care were also included in the package. The insurance premium was TK.120 for GB per member family and TK.150 for non-members up-to 6 members.<sup>20</sup>

The MHI program has been reviewed to assess its impact on reducing poverty. Impact assessment has demonstrated an insignificant influence of MHI on household income, ownership of assets and poverty reduction. The health expenditure and the lost days of productivity between the program and control areas were identical. It is likely that the co-payments might have compelled the participant not to use health services even if they are insured and rely on other providers for their health problems.<sup>21</sup>

### **International Experience**

In the international context there is abundance of community health Insurance scheme in African, Eastern Asian and Latin American regions. The community based health insurance of Burkina-Faso is included in this report due to its unique design, pro-poor approach and rural focus.

#### **Burkina- Faso Community Health Insurance**

A community based health insurance model known as Assurance Maladie a Base Communautaire (AMBC) was launched in Nouna district, Burkina-Faso in 2004 through a step-wedge cluster randomized control trial. Health insurance was offered on voluntary basis to the families. A premium of West African Franc (CFA) 1500 was charged from adult member and CFA500 from a child in a family. The insurance package first level and up-to 15 days of inpatient care was covered in the package including essential and generic medicine. The package introduced a strong referral system where a patient can seek care at secondary level upon referral from the first level. There was no upper limit of coverage and no-copayment/deductibles.<sup>22</sup> Based on initial findings of poor enrolment and high drop-out, the premium was reduced by half for the lowest income quintile families. Evidence suggests that subsidy did increase enrolment of the poorest of the poor and that the poor enrolled in the scheme have higher utilization than those not enrolled. However the scheme could not

address the issues related to access to healthcare services such as distance to health facilities that translate into high travel cost and time cost of seeking healthcare.<sup>23</sup>

## Evidence Synthesis

The literature findings and synthesis is drawn on review articles regarding barriers to maternal child health<sup>24</sup>, reviews<sup>25</sup> and systematic reviews<sup>26</sup> on key aspects of community based health insurance in developing countries. The summary of key findings is given below.

Most of the schemes offered services package of inpatient or outpatient services for the whole family in which the MCH services are (not) included. We did not find any scheme exclusively covering maternal and child health.

Many community based health insurance schemes reviewed in the scientific literature reported very low coverage (at most 10 %) of the target population .This could be due to incompatibility of needs and the insurance package offered. The target population might have more need for outpatient services but most of the available schemes offered financial protection against healthcare shocks of in-patient/hospitalization costs.

The schemes reviewed were often offered on a voluntary basis. The past experience and future healthcare needs of the target population played a key role in buying insurance. There is only one example of a community based health insurance scheme by NRSP. The premium of micro health insurance of NRSP was imbedded in the registration fee for the micro credit clients. Therefore, clients of the NRSP micro credit were automatically registered for the micro health insurance through Adamjee Insurance Company.

The community based health insurance schemes demonstrated effectiveness in providing financial protections to the poor but largely failed to cover the least well-off groups. The non-affordability of the ultra-poor to pay premiums is the key of cream skinning by insurers. The micro health insurance in India is one exception that ensured the participation of the families living below poverty line,<sup>19</sup> while in Burkina-Faso; the scheme was revised and lowered the premium rates for the poor.<sup>25</sup>

Many micro health insurance schemes are engaged through private insurance companies for the insurance arrangement such as premium collection and reimbursement/third party payments. The profit making in these schemes has probably hampered the efforts to include and protect the ultra-poor. Only financially viable services are included in the coverage package from an insurance framework perspective. The exclusion of MNCH related expenses from the Jubilee insurance in GB is one good example of cream skinning.

Travel cost and time cost to seek healthcare are the key impediments in optimal demand for healthcare yet many schemes did not cover these cost in the services package. As such, the families that have easy access to healthcare facilities had relatively higher participation in

the health insurance schemes than families facing distance constraints to reaching healthcare providers.<sup>24</sup>

The literature on community based/ micro health insurance is almost silent on the health benefits of the health insurance schemes. The main reason is that the objective of the schemes is mainly financial protection of health shocks rather than improvement in health status.<sup>26</sup>

Literature on community based health insurance schemes has almost unanimously pointed out user fees are an impediment in access to healthcare services. This largely affects the ultra-poor groups of the society. The removal of user fees for maternal services has increased mean number of registered deliveries by 4.6% in South Africa.<sup>27</sup>

## **Findings part 2: Stakeholders Analysis in Gilgit Baltistan**

During the stakeholder's consultation and field visit, various modalities of the pro-poor financing schemes were worked out. The health system in Gilgit Baltistan, the rural support program, community organizations and the communities were the key stakeholders in the development of the pro-poor financing mechanism.

### **Healthcare system in Gilgit Baltistan**

The health system of Gilgit Baltistan comprises the public provision of health services by the government of GB, the Aga Khan Health Services, Pakistan and private providers. The overview below of health systems in GB mainly focuses on the two major providers i.e. Department of Health (DoH) and the Aga Khan Health Services, Pakistan (AKHSP).

#### **Department of Health**

The public health system in Gilgit Baltistan is similar to the rest of the country in terms of structure, functioning, financing and delivery. The DoH Gilgit Baltistan (GB) has a network of 486 health facilities and preventive and a vertical primary healthcare program. There are five District Headquarter Hospitals (DHQ), 27 Civil Hospitals (CH), two Rural Health Centers (RHC), 15 Basic Health Units, 190 Rural Dispensaries, 93 MCH centers and 154 Sub-health Centers in GB. The financial situation of the GB DoH for the year is given in table below. There is a 45% increase in the budget allocations in 2012-13 as compared to 2011-12. This increase is mostly in establishment charges and the Annual Development Program. The non-salary budget which includes medicines and operational expenses has decreased by 6 % and 16% respectively in the year 2012-13.<sup>28</sup>

**Table 2: Government Health Allocation/Expenditure(PKR in million)**

Health Sector	2011-12	2012-13
Regular Budget	606.52	830.38
Salaries	507.98	743.39
Operational expenses	47.44	44.32
Medicine	51.11	42.77
Annual development program	142.3	257.62
Chief Minister's package	8.05	6.75
Total	756.87	1094.75
Source: Web portal of government of Gilgit Baltistan		

An extensive network of health facilities is the key feature of public health services delivery in GB. However it is facing operational challenges such as posting trained human resources to health facilities and ensuring adequate supply of medicines and other essential items. The maternal and child health services are lacking due to non-availability of female staff and essential supplies to provide timely MNCH related emergency and routine checkups. Health infrastructure of DoH is still the largest in the region. It is supposedly free of charge but due to shortage of funds on non-salary inputs, people most probably pay out-of-pocket for buying medicines and other essential supplies while seeking healthcare at DoH health facilities. The nature and extent of OOP payments on availing health services in GB is undocumented yet international evidence suggests that un-official payments have contributed to 30 percent of the cost of public healthcare in some developing countries.<sup>29</sup> In such cases the OOP health expenditure in public health facilities can be similar to other not-for-profit healthcare providers in the region. Earlier this year the government of GB introduced user's charges for availing health services at the DoH facilities. For example the user's charge for out-patient visit is PKR15, doctor's fee is PKR50, X-Ray is PKR150 and ultrasound is PKR 200.

### **Aga Khan Health Services Program in GB and Chitral**

Aga Khan Health Services, Pakistan (AKHSP) is an extensive network of primary and secondary healthcare services in GB and Chitral. There are 32 health facilities in GB and 34 health facilities in Chitral. There are seven family medical centers, 2 extended medical centers, 2 medical centers and 21 MNCH centers in GB. The health services are provided on a cost sharing basis at all health facilities of AKHSP. However, the extent of cost sharing is determined considering socio-economic status of the target communities and the cost of services depends on the type of health facility. For instance, the charges of normal vaginal delivery by a nurse are PKR 1800 at the Gilgit Medical center (GMC) in district Gilgit while the same service is charged at PKR 1500 in Singal Medical Center (SMC), Ghizar. In Hunza-Nagar, the services charges for normal vaginal delivery are PKR 1050 at Family Health Center (FHC) Aliabad and PKR 1000 at FHC Gupis in Ghizar. For visiting a gynecologist at GMC, the charges are PKR 550 While the same service is charged at PKR 270 in FHC Aliabad. For the

Health Micro Insurance (HMI) there were special rates for reimbursement to Jubilee Insurance, usually less than the market rates. For instance, the charges of normal vaginal delivery for HMI are PKR 1050 in GMC, PKR 1275 in SMC, PKR 867 in FHC Aliabad and PKR 850 in FHC Gupis. For consultations by gynecologists, the charges are PKR 465 and PKR 230 at GMC and FHC Aliabad respectively. This probably follows the AKDN policy to overcome the high loss ratio of the HMI or the cost variation due to different kind of inputs at different type/tiers of health services centers.<sup>1</sup>

### **Aga Khan Rural Support Program**

The Aga Khan Rural Support Program (AKRSP) is a project of Aga Khan Foundation. Established in 1982 the objective of AKRSP was reducing poverty and vulnerability in the remote areas of Gilgit Baltistan and Chitral regions in Pakistan. Community development through social mobilization and promotion of community based institutions is the main approach of the program. Village Organizations and Women's Organizations (VOs and WOs) were established throughout the area. Later on AKRSP promoted Local Support Organizations (LSOs) to provide an overarching and coordination mechanism to micro level of community organization.

LSOs work for a larger geographical area similar to a Union Council. LSO bridges the network of VOs, WOs and other civil society organizations. They work in partnership with the public and private sectors, civil society and public representatives. The LSOs are managed on a voluntary basis yet they maintain a regular paid management staff. The management of an LSO is governed by a Board of Directors appointed through elections. Currently, there are thirty-three (33) effective LSOs in the four districts of GB namely Astore, Ghizer, Gilgit and Hunza/Nagar.

## **Findings Part 3: Data Analysis**

This section provides details on the target population, MNCH related healthcare needs in GB region, poverty analysis, services delivery package, cost of package and financial implications for the target population.

Using the 1998 population census data of the population, Demographic and Health Survey of Pakistan (2005-06) and Gilgit Bastian Demographic and Health survey (2008) the target population for maternal and child health is estimated for the current year<sup>2,30</sup>. Estimates of under-one children and married women of child bearing age in four districts as well as provincial aggregates are given in following table.

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<sup>1</sup> Data provided by the AKHSP Head office in Karachi

Table 3: Estimated population &amp; target population in Gilgit Baltistan

District	Projected Population 2013	Married women of child bearing Age	Estimated deliveries	Under 1 year population
Gilgit District	216087	34574	5056	5186
Hunza-Nagar	144097	23055	3372	3458
Ghizer	177024	28324	4142	4249
Astore	114993	18399	2691	2760
Gilgit Baltistan	1549129	247861	36250	37179

The pro-poor financing mechanism would provide protection against health expenditure shocks to household economic assets. The national level estimates on the extent of out-of-pocket expenditure and its determinants are reported by Malik and Azam (2012). They reported OOP health expenditure of PKR 2500 in the year 2004-05.<sup>31</sup> This does not include travel cost. The Gilgit Baltistan socio-economic status survey reports medical expenditure and traveling expenditure for seeking healthcare. Using the AKRSP dataset (AKRSP, 2010)<sup>6</sup> health expenditure in Gilgit and Baltistan regions is estimated and summarized in table below:

Table 4. Health Expenditure in Gilgit Baltistan in the year 2008 (in PKR)

Region	Medical Expenditure (ME)	Travelling Expenditure (TE)	Total Health Expenditure (THE)	TE as % of THE
Gilgit	12732.98	2159.87	14892.85	14.50
Baltistan	9086.67	2033.76	11120.43	18.29
Total	11128.6	2104.381	13232.98	15.90

Health expenditure including medical and travel expenditure is high in the Gilgit region where MCCS project is being implemented. Travel cost as percent of total health expenditure is high in Baltistan region. The health expenditure as percentage of household total expenditure in Gilgit Baltistan is around 10% in the year 2008<sup>6</sup>

Analysis of GB population census data and the poverty incidence reported in GB Socioeconomic Impact Survey, 2008<sup>6</sup> were used to estimate the incidence of poverty and extreme poverty for the year 2013. Thus the target population eligible for the pro-poor financing mechanism is determined. The findings of these analyses are summarized in Table 5 below:

Table 5. Household incidence of poverty in MCCS project districts in Gilgit Baltistan<sup>2</sup>

District	Total households	% of Poor	% of ultra-poor	% all poor	Number of poor & ultra-poor household
Gilgit District	21609	23	4	27	5834
Hunza-Nagar	14410	18	5.5	24	3386
Ghizar	17702	28	5.5	34	5930
Astore	11499	33	7	40	4600
Total 4 districts	65220	25	5.5	31	16364
Gilgit Baltistan	154913	28	5.5	34	51896

The target population of the scheme is 65 thousand would be the potential population of the pro-poor financing mechanism. Out of these around 16 thousand poor and ultra-poor households would be the main beneficiaries.

## Maternal, Neonatal and Child Health Service Package

Maternal and child health (MNCH) services are required throughout the child bearing age of a woman and her children. However from a health systems perspective the medical care need for MNCH continuum of care is defined from inception to children under the age of five years.<sup>32</sup> This is roughly a six-year time span. It involves an immense variation in terms of health problems of the mother and the child. Due to resource scarcity and poor healthcare financing situations in developing countries, the focus of health policy has been on an essential package of health services rather than a comprehensive care.<sup>32</sup> Various packages have been developed in international and local contexts. The World Health Organization's services package of Primary healthcare recognized MNCH as its key component.<sup>33</sup> In Pakistan efforts have been made to ensure safe motherhood and child health through various initiatives. The Ministry of Health of the Government of Pakistan has developed an MNCH services package.<sup>34</sup> The Government of Punjab has also defined MNCH services at the primary and secondary care level.<sup>35</sup> These packages have been developed in the local context considering available human and other resources and their geographical and social disparities. We considered these Government service packages for developing benefits of the CHRF scheme.

The package of services of the CHRF was developed in consultation with the local health care providers in GB. The consultation was held in November 2013 in Gilgit in which local providers including gynecologists, pediatricians and community health care providers were consulted. Deliberations of the consultation highlighted three levels of services: community level, first level of care and secondary care. At the community, the first level of care was

<sup>2</sup> Poverty head count estimates in GB socioeconomic trend report (AKRSP, 2010) are used in the analysis of poverty for the year 2013



expected to provide basic emergency obstetric and neonatal care (BEmONC). While at the secondary level, the services package would provide comprehensive emergency obstetric and neonatal care (CEmONC). In development of the services package there were some specific considerations given below:

- Demographic, socio-economic and geographical features of the area and target population
- Health services and healthcare providers in the project districts of GB
- Long term sustainability of the scheme and its scale-up
- Funding for pro-poor financing in MCCA project

The package of services includes some basic and a few comprehensive EmONC services. Community and first level of services include antenatal care, normal delivery and neonatal care; while secondary care includes managing complicated deliveries at secondary care hospitals in the region. In the following table the services package is provided.

Table 6: MCH services Package

Services Type	Package
Antenatal care	Four antenatal visits (family physician/medical officer) with necessary laboratory and radiology examination (two ultrasound scans) and iron and folic acid supplements
Institution-based normal delivery	Institution based normal/assisted delivery including medicines and necessary laboratory examination
Complicated delivery	Caesarian section with five days inpatient care (in general ward) for mother and neonate including bed charges, medicines, necessary laboratory and radiological examination
Postnatal care	Three out-patient visits (2 <sup>nd</sup> and 6 <sup>th</sup> and 20 <sup>th</sup> day after delivery)
Travel Cost	As worked out by the LSOs and WOs based on the cheapest mode of travel

## Cost estimates and financial implication of the scheme

We considered the available health system in the Gilgit Baltistan as the basis of cost estimation. We obtained cost of services data of the various primary and secondary care health facilities operated by the Aga Khan Health Services, Pakistan (AKHSP) in Gilgit Baltistan. The data pertains to user charges at Gilgit Medical Center; Extended Family

Health Center, Aliabad; and Extended Family Health Center, Gupis. Except Gilgit Medical Center, the other two facilities are primary level care facilities. All costs are estimated in Pakistan Rupees (PKR). We included services of the medical officer for antenatal visit and family physician for postnatal care in cost estimations. We used the average cost rounded to PKR100 of the three centers for all services except complicated delivery. The cost of complicated delivery was estimated solely on the basis of services charges at the GMC. The cost of the package of services ranges between minimum PKR1000 and maximum PKR25000. In the table below the details of the cost estimates are given.

Table 7: Cost of CHRF services package

Health Services	Rate per visit/episode of care (in PKR)	Total cost (in PKR)
Four antenatal visits	1300	5200
Normal delivery	2700	2700
Assisted delivery	3700	3700
C-section with 5 inpatient days	18000	18000
Two postnatal care visit	1000-1300	2300
Normal delivery package	-	10200
Assisted delivery package	-	11200
C-Section delivery package	-	25500

The cost estimates were used to forecast the financial layout of the scheme. Since limited data on types of obstetric deliveries in the GB context was available, we used published evidence on caesarian section rates for this purpose. Literature reported evidence on country specific and region specific caesarian section rates. Betran and Merialdi et al (2007) reported 6% caesarian section rates for the south and Central Asian region.<sup>36</sup> In a multi country analysis on primary data, Lumbiganon and Laopaiboon et al (2010) reported 18% rate of caesarian section, 3% rate of operated deliveries and 79% rate of spontaneous deliveries in India for the year 2007.<sup>37</sup> Ronsmans and Holtz et al, (2006) reported 2.7% rate of caesarian section in Pakistan using Demographic and Health Survey(DHS) data from 1990.<sup>38</sup> They further reported a difference of 1.55 between the rural rich and rural poor in caesarian sections. From the literature search and expert panel consultation in GB on the services package, we assumed a 6% rate of caesarian section and 10% rate of operated deliveries to estimate the financial layout of the MNCH package of the CHRF scheme. Assuming a population of 10,000 people for one Local Support Organization, we estimated the cost of the MNCH package is PKR 2.6 million. Assuming an additional cost of 5% on management of the scheme at community level (LSO level) the cost to implement this scheme is 2.75 million. The details of these estimates are given in Table below.

Table 7: MNCH services model for a Local Support Organization

Target population	10,000
Household/families	1,000
Married women	1,600
Estimated deliveries	234
Families with MNCH services demand	374
Caesarian Section deliveries package	14
Operative deliveries package	23
Spontaneous deliveries Package	196
Cost of C-Section	357,408
Cost of operative delivery	261,632
Cost of spontaneous delivery	2,001,485
Total cost of MNCH	2,620,525
Administrative cost @ 5%	131,026
Grand cost	2751551
Cost per delivery	11779

The financial protection would be provided to 3510 obstetric deliveries during a year. The project would be implemented in a population covered by 15 LSOs in four districts. It would provide coverage to 0.15 million population.

## Poverty Analysis and scheme entitlement

The poverty incidence is reported to be 40% in GB. In the project district, the maximum poverty incidence is 40% in Astore and the minimum 24% in Hunza-Nagar. In this context it is safely assumed that the scheme would be able to reach all the population living below the poverty line. MCCS project funds will be utilized to protect the ultra-poor and the poor families from the catastrophic and impoverishing nature of out-of-pocket payments on MNCH related healthcare needs.

The revolving fund CHRF would provide soft loans to families for their MNCH related needs according to the services package defined above. The interest rate would vary according to the economic status of the family. For instance the ultra-poor would be offered loan at a 6% interest rate while for the poor the interest rate would be 8%. All non-poor would be offered loans on market interest rates. In this context the identification and eligibility criteria is an important aspect to ensure transparency, equity, efficiency and ownership of the scheme.

## Incidence of Poverty in Gilgit Baltistan

In order to provide an overall financial picture of the pro-poor financing mechanism, the estimated target population of MCCS and MNCH services package, are used to estimate the need for poverty specific MNCH services. The GB socio-economic status (SES) survey 2008 provides the only poverty analysis on Gilgit-Baltistan using household income and

expenditure modules.<sup>6</sup> The following table draws on the same survey. This survey reported that 34% of the population was living below poverty line poverty in GB. The report used the official poverty line of Government of Pakistan for the year 2008 was PKR 16,434.

Extreme poverty is defined as half of the official poverty line, or PKR 8,217. We applied the poverty estimates reported in the 2008 analysis to the current population of GB in order to estimate the poverty incidence in 2013. We further derived the demand for MNCH services package by the poor and its financial implications. The total cost to meet the demand of MNCH services in the four districts targeted is PKR 50 million to cover the target population. In the following table these analysis are provided.

Table 8: Financial lay out (in PKR) and demand of CHRf fund for the poor

District	Gilgit District	Hunza-Nagar	Ghizer	Astore	GB
Poverty estimates (as percent of total population)					
Poor	23	18	28	33	28
Ultra-poor	4	5.5	5.5	7	5.5
All poor	27	24	34	40	34
Demand for MNCH services					
Estimated obstetric deliveries	1365	809	1408	1076	4659
All poor C-sections*	33	19	34	26	112
All poor operative deliveries	137	81	141	108	466
All poor spontaneous deliveries	1196	709	1234	943	4081
Financial implications(in PKR)					
All poor C-sections	.84	.50	.86	.66	2.85
All poor operative deliveries	1.53	.91	1.58	1.21	5.22
All poor spontaneous	12.20	7.23	12.58	9.62	41.63
Total cost of the MNCH services for the poor	14.56	8.63	15.02	11.48	49.70

\* at 40% of the all C-sections (ratio 1.5)

## Poverty ranking in Gilgit Baltistan

The above analyses are based on the household income. These analyses only provide the overall financial picture of the pro-poor financing mechanism. The next step is to define criteria to identify the poor in the target communities. Total household income or total expenditure is good proxy to define the socioeconomic status of the households. However, it is difficult for the community organizations to collect data on households' income or expenditure. Social safety nets use proxies of household income or expenditure to identify the poor households such as household assets, demographic and social characteristics, etc. Proxy Mean Testing (PMT) and Participatory Wellbeing Ranking (PWR) are commonly applied to determine eligibility to social protection schemes such as conditional cash

transfers and access to social services delivery. In PMT, scores are assigned to various characteristics of the household such as demographic features, household assets, livelihoods and community access to social and economic opportunities. These scores are aggregated and used to identify poor and ultra-poor in the community based on arbitrary cut-off values.<sup>39</sup>

Participatory Wellbeing Ranking (PWR) on the other hand ranks the population from rich to poor in a given community. It is a non-parametric method that is used to estimate relative poverty. It is used mainly at the community level. It is relatively easy and requires few resources in terms of time required to collect data and analytical skills.<sup>40</sup> Proxy mean testing on the other hand is a parametric method used to estimate relative poverty for schemes that are offered at national or regional levels. To determine eligibility for pro-poor financing, we provide criteria for both the methods. In both cases criteria should be universal across the target districts for the scheme.

In Gilgit Baltistan, few social safety nets are in place. These safety nets use mainly two poverty ranking methodologies for eligibility to their scheme. In the following paragraphs a quick review of these methodologies is given.

### **Proxy means testing (PMT)**

In consultation with the community members in September 2013 at Gilgit, certain issues were highlighted regarding use of PMT in the Benazir Income Support Program (BISP). Participants pointed out community dissatisfaction with use of some household characteristics such as “kind of toilet” at the household. Due to methodological issues in the PMT technique for poverty ranking<sup>41</sup> it is possible that people ranked poor in one community might not be poor in another community. Despite this equity shortfall for national or regional level schemes, PMT is widely used as method to determine poor families. Another drawback of the PMT scoring method is the use of cut-off scores below which families can be ranked as poor. In the GB context it would be appropriate if the cut off scores were set above the BISP cut off. For example, the BISP is intended to initially cover only 5 million families nationwide, and therefore the cut off score is 14. A family below the cut of scores of 14 is eligible for the cash transfer.<sup>42</sup> If the target is set to cover 29% population living below poverty line currently than the cut-off score would be relaxed to 19 points. This will bring an additional 15% of the families in the safety net. The proxy scores for different variables of family wealth used by BISP using PSLM data set of 2004-05 is given in the annexure-3.

### **Participatory Wellbeing Ranking (PWR)**

For the PWR it is essential that characteristics of the households that defines socio-economic status be similar across all LSOs. It would be appropriate that such characteristics be developed in wider consultation with the key stakeholders in this project. The list of

characteristics may also include local understandings of wellbeing in the GB context such as dependency ratio, sources of earnings, number of children, relationships to important people, and ownership of assets such as land and livestock. At the community level it is highly recommended that poverty ranking should be done by community members and not LSO members. The LSOs should organize a group of highly trusted community members/elders for this purpose which includes representations from VOs and WOs. Similarly during such gatherings the community should agree upon the geographical boundaries of the target community. Adopted from the World Bank Wealth ranking methodology,<sup>43</sup> the specific task for the poverty ranking would include but not exclusive to;

- Prepare a list of all of the households in the community
- Prepare a card for each family
- The ranking can be done by piling cards from the wealthiest family to the poorest family. It may also be a grouping of the cards into ultra-poor, poor and non-poor.
- The community may consider additional local aspects of reproductive healthcare needs and its financial burden to the families such as available health and social services to the community and means of communication to access health facilities

### **Addressing adverse selection of poor and ultra-poor**

The issue of adverse selection was placed for discussion with stakeholders. Besides some known strengths of community wealth ranking such as community ownership, it is possible that some families might be incorrectly selected as poor or ultra-poor. Due to this possibility, it would be appropriate to cross validate the community poverty rankings with other poverty rankings of other social security schemes such as Zakat and BISP. For the purpose of convenience, the scores of BISP can be used to cross validate the poverty ranking by PWR. It is also possible that these scores are used for ranking the poor in the community instead of PWR.

### **Definition of a Household or a family**

The definition of a family was one of the topics explored in the stakeholders' consultation. Family definition is important to determine eligibility in the scheme, as well as subsidy and premium rates. The social safety net program such as BISP defines a family beyond married couple such as widow and divorced people living with their children.<sup>44</sup> In the case of the pro-poor financing mechanism the package of services is limited to a narrow definition of the family as one that intends to expand their family. The definition of the family thus would be:

- (i) Husband, wife (in child bearing age) and unmarried children;
- (ii) Husband and wife (in child bearing age) without any children

## **Pro-Poor Financing Framework**

### **Economic argument pro-poor maternal and child healthcare scheme**

Viability of an insurance mechanism relies on the rationale that the ex-post aggregate benefit of the insured population equals the ex-ante aggregate financial contribution. An individual/household is expected to benefit from buying insurance, and this benefit should exceed the out-of-pocket expenditure to meet the cost of healthcare needs. Health insurance models operate under certain pre-requisites. Adopted from Schmit, 1986, these pre-requisites are:<sup>45</sup>

- Large number and independent exposure to risk
- Losses covered are definite (time, place and amount)
- Measurable probability of loss
- Accidental nature of loss

With respect to insurance model for maternal and child illness, the last principle seems violated where need for healthcare services is ex-ante certain as is the case in obstetric deliveries. We could not find any example of exclusive MNCH insurance from the literature search except the Thai card scheme launched in phase one which offered MCH services inclusive and exclusive of other treatment.<sup>46</sup> The reason for this gap is the planning nature rather than chance nature of pregnancies. The maternity related and postnatal healthcare needs will arise once a family plans to have a child. All families that have completed their family would opt-out of MCH insurance in the Thai card scheme. In GB, MNCH related services were excluded from the family health insurance offered by Jubilee Insurance in GB region. The Thai scheme also had an affordable insurance premium. The literature review further revealed that micro health insurance plans offered at the community level have commonly overlooked the poorest of the poor<sup>26</sup>, however this exclusion has been mitigated in cases where the insurance premiums for the ultra-poor were subsidized for example in SEWA the premium for the ultra-poor was subsidized .<sup>19</sup>

The two theoretical challenges of the proposed pro-poor financial scheme for MNCH in GB are ultra-poor inclusion and exclusive MNCH services coverage. Both of these aspects may pose challenges to financial viability and require a sound financial protection mechanism.

### **Positive externalities and altruistic preferences**

In the case for consumption of goods or services that bear broader benefits to the community, an individual/family may be willing to contribute financially even though there may not be any direct benefit to that individual/family. This behavior is defined as altruistic preference and the benefits of use of a good or services extended beyond the consumer are the positive externalities. In many preventive and curative healthcare needs, availing healthcare creates positive externalities beyond the persons that have the healthcare need.<sup>47</sup>

The theoretical possibility of altruistic preference and helping behaviors towards fellow community members is widely supported by scientific evidence. More importantly, in rural areas it is significantly more common than in urban areas. Results of a meta-analysis reveal that in rural areas people have a higher rate of helping behavior than in urban areas with an effect size of 0.29.<sup>48</sup> In the case of GB, more than 80 percent of the population lives in rural areas. It is expected that altruistic preference behavior would enable contribution of high income families and families with limited pregnancy related and child healthcare needs to subsidization of the poor due to positive externalities of protection against MNCH related healthcare costs.

### **Not-for-profit community organization**

For services with less potential to earn profit, community organization is a vital approach to manage common community problems. The process of community mobilization and change requires that a community identify the problem, set objectives, mobilize resources and implement strategies.<sup>49</sup> This type of arrangement to achieve a common goal in economic terms is categorized as not-for-profit organization. In not-for-profit organization, no one has a legal claim on the earnings of the organization. Earnings are usually reinvested, kept as an endowment or used for other charitable purposes. Not-for-profit organizations are well suited to promote and formally retain the benefits of altruistic and helping behavior in social services such as health as compared to for-profit organizations.<sup>50</sup> Recent evidence suggests that not-for-profit ownership is equally efficient as for-profit ownership, negating earlier notions that for-profit organizations are more efficient at the community level.<sup>51</sup> The role of not-for-profit organization in healthcare is well established. There is evidence suggesting that not-for-profit healthcare works best in situations of service unaffordability, unprofitability and where the non-profit community benefits from services provision.<sup>52</sup>

Health insurance for MNCH services is one such domain not offered by the private sector as it is not profitable. Moreover, from the literature review, we could not find a financial protection scheme exclusively dedicated towards MNCH services. Even if MNCH insurance were offered through some market mechanism, the population segment living below poverty may not be able to afford the premiums. Lastly, MNCH services have immense nonprofit benefits to communities due to positive externalities of provision of MNCH



services. Considering the above, a financial protection mechanism that is rolled out on the principles of a not-for-profit with community ownership is more likely to be successful.

## **Community Health Revolving Fund (CHRF)**

The healthcare financing mechanism for the financial protection for the poor and ultra-poor would be known as “Community Health Revolving Fund”, abbreviated as CHRF. This scheme would borrow the economic rationale of social protection and community based health insurance that has been explored by Jacobs and Bigdeli (2008).<sup>53</sup> The social protection aspect of CHRF would be the protection of the poor and ultra-poor by the equity funding from the MCCS project. The CBHI component would be the not-for profit voluntary enrolment by the community. It would be implemented across 15 LSOs in the four districts of the MCCS project.

CHRF would operate on a not-for-profit basis. It would be available to vulnerable families in the neighborhood of each woman’s organization that qualify for the pro-poor funding from the MCCS project. It would rely extensively on community organization to encourage altruistic behavior for financial contribution, transparency and equity in utilization of MNCH services specified in the services package. The pro-poor healthcare financing schemes is intended to reduce health expenditure shocks and to avoid their catastrophic nature and potential to impoverish.<sup>54</sup>

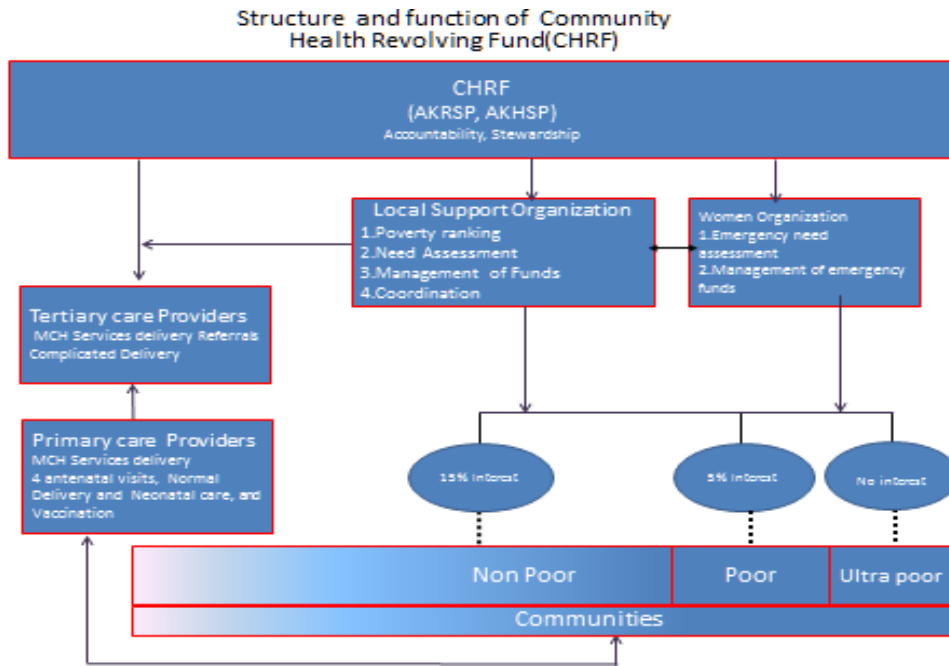
The goal of the CHRF aligns with the overall objectives of the MCCS project, international commitments such as Millennium Development Goals (MDGs) four and five, commitments such as the Pakistani National MNCH health policy as well as support efforts of the GB government. The goal would be to improve maternal, neonatal and child health of the target population including poor and non-poor by removing financial barriers to access, improving access through health system strengthening and optimize health seeking behavior.

The CHRF would have the following specific objectives:

- address healthcare needs for maternal, neonatal and child health
- avoid the catastrophic and disastrous consequence of cost of MCH services on the family
- promote altruistic behavior and solidarity among communities to manage their healthcare needs
- promote the culture of community ownership and participation

## **Structure and scope of the scheme**

The scheme would be implemented with three entities, the communities and their representative bodies, the healthcare provider and the pro-poor financing fund. The interaction between these three entities is elaborated with the help of following diagram:



The scheme would be financed by the community with specific contribution from the MCCS project. Scope of the scheme is given below:

- It will be inclusive of the poor but not exclusively for the poor
- It will be exclusive to maternal, neonatal and child health excluding all other health services
- It will be operational in 15 LSOs in four districts of Gilgit Baltistan (Astore, Gilgit, Hunza-Nagar and Ghizer)
- It would be piloted with MCCS endowment fund for one year and would continue as independent not-for-profit upon expiry of the MCCS project
- It would be managed by the local support organization and women organization at the community level.

### Features of the scheme

The pro-poor financing mechanism would be implemented in four MCCS project districts in Gilgit Baltistan (GB). The project would approximately serve a population of 0.15 million in GB for their maternal, neonatal and child health (MNCH) needs with full coverage in four districts. More than one hundred thousand women of child bearing age would directly benefit from the project. It is estimated that with full coverage of population in four districts, financial protection would be provided to over fifteen thousand pregnancies during a year. The specific features of the CHRF are given below:

**Financing:** An endowment of PKR 1 million (10,500 CAD) would be provided to each LSO in the MCCS project district to provide soft loans to the community members towards their MCH related services need. An additional PKR 200,000 (1950 CAD) would be provided to each WO as an emergency fund to meet the emergency MNCH services needs of the community members. Each community member would be eligible to avail loans but at different interest rates. The interest rate for the ultra-poor and the poor would be subsidized at a rate of 5% and 10% per annum. The target population of the ultra-poor and poor would be defined by the PWR and would be validated by the PMT. However for the financial sustainability of the scheme the ultra-poor and poor should not exceed roughly 35% of total enrolment to make CHRF scheme viable. A threshold level for the beneficiary (i.e. 35% of the target household) is required to avoid the free rider effect in scheme enrolment and to make the scheme financially sustainable.

**Scheme entitlement:** The scheme members would be entitled to avail a package of maternal, neonatal and child health services at the designated health outlets defined in this document. The coverage would include travel cost for presumptive shifting for obstetric deliveries according to specific criteria to be developed by a panel of local experts. The expenditure on medical services availed at the designated services would be reimbursed directly to the healthcare providers.

**Services package:** Maternal, neonatal and child health services would be included in the CHRF. Every woman in the age range of 15 to 45 would be eligible for MNCH related health services at the pre-defined healthcare providers in the region. Early childhood illness up to the age of 5 years would be covered in the scheme as well. The service package would also include travel costs in cases where MNCH services are out of the reach of the families in need. The needs assessment for funding for MNCH services would be the responsibility of the LSOs and WOs.

**Risk pooling:** The scheme would be offered to a community where an LSO is working. Local support organizations and WOs would be mandated to enroll households seeking MNCH care. The initial funding would be provided by the MCCS project. However, as the financial support would be offered much less than market rate, this would result in depletion of capital stock in the long run. In such case, it would be essential that local communities enhance the financial resource base through their own means. A community may seek donations or may start their own contribution to maintain an amount in their fund balance required to meet the demand of financial services for MNCH related needs of the community.

**Management at community level:** LSOs and WOs would be responsible for community mobilization, generation of additional resources, coordination of healthcare provision, and maintenance of data related to the scheme and certifying criteria for

presumptive shifting. LSOs and WOs would also carry out regular dissemination and promotion of the CHRF activities to a wider audience.

**Poverty scoring/ranking:** At the micro level, community wealth ranking is widely used to identify the poor for subsidies to some specific geographic area such as Burkina Faso.<sup>40</sup> The scheme would adopt a robust criterion to pre-identify the poor and ultra-poor in the communities based on measurable and quantitative indicators. There is evidence that pre-identification of poor is more cost effective than post identification at the health facility level.<sup>55</sup> This criterion would be universal to determine poor and ultra-poor families across all regions of Gilgit Baltistan. Current practice for poverty ranking in the regional and national level would be adopted for use of poverty ranking for CHRF.

**Financial management:** Each LSO and WO would be responsible for managing the endowment fund provided by the MCCS project. The AKRSP would oversee the financial management of LSOs and WOs. The routine audit of the LSO would also cover the financial transactions of the CHRF.

**Stewardship and Accountability:** Since the scheme would be working in four districts and community organizations in each district, it is essential that an overarching body be in place to provide stewardship and policy support to the implementing LSOs of the scheme. The scheme would be overseen jointly by AKRSP and AKHSP. A steering committee is recommended to be formed to oversee the financial and administrative matters of the CHRF.

**Scheme roll-out and operational plan:** The scheme would be rolled out in the selected district of the MCCS project within 15 LSOs catchment areas. The features of the scheme, eligibility of the LSO/ WO for funding and poverty scoring criteria would be widely disseminated to encourage WOs to start the scheme for their community.

## Conclusion

Community based health financing schemes and social protection for the poor are widely recognized as solutions to overcoming catastrophic health expenditures and poor indicators of maternal, neonatal and child health in the areas that are underdeveloped, informal, rural, inaccessible and difficult to benefit from public sector intervention. We proposed a health financing mechanism that would rely on the approach of community organization for financial contribution and would be supported by significant contribution in the form of funding, health system strengthening and health promotion and nutrition intervention of the MCCS project. It is expected that this scheme would contribute to improved maternal and child health in the Gilgit Baltistan region.

## **Aga Khan Rural Support Program's implementation plan**

### **i) Introduction**

Access to finance is a critical concern for women in Gilgit-Baltistan due to their limited mobility and lack of control over resources. One of the key constraints to accessing health services for maternal, neonatal, and child health (MNCH) at the local level is the timely access to finance. High quality maternal, neonatal and child care are general needs of families and especially poor and very poor families who often do not have timely access to financial resources. Geographical remoteness and poor transport are other factors that constrain access to health facilities, especially during pregnancy and at the time of delivery. Mother and child survival is very dependent on having the financial resources needed to access health facilities in a timely manner.

Different strategies and interventions are needed to facilitate access to the resources needed to finance good quality care. The approach presented here calls for establishing a CHRF by providing a one-time micro-grant to Local Support Organizations, 15 in total, operating in the four AKRSP operational districts (Gilgit, Ghizar, Astore and Hunza-Nagar) of Gilgit region. The proposed approach is in line with the overall objectives of the MCCS project which includes piloting health financing schemes to improve access to quality MNCH services as one of the project objectives.

### **ii) Rationale for CHRF at LSO level**

AKRSP and AKHSP have had a series of meetings to identify a suitable mechanism which addresses the issue of timely access to finance for maternal, neonatal, and child health (MNCH) at the local level, especially for poor and very poor families. This financing mechanism is designed to address the fact that the existing financial products offered by different banks and microfinance institutions (MFIs) require a processing time of at least one week with interest rates that exclude the poor and ultra-poor. Moreover, such financial products do not cover MNCH and transportation costs. Therefore, it was agreed that AKRSP will mobilize LSOs together with WOs to implement suitable mechanism to ensure timely access to finance for MNCH needs.

In the AKRSP program area, 12 LSOs across Gilgit-Baltistan and Chitral (out of which six LSOs are in the Gilgit region), are currently managing a Community Revolving Fund (CRF) worth CAD \$ 10,500 per LSO. The main objective of the CRF is to provide women with easy access

to finance, mainly to support small scale income-generating activities. While managing the CRF, the 12 LSOs have accumulated the experience and skills to operate a community-based financing mechanism. As a facilitating organization, AKRSP has also built in-house human and institutional capacities to design and implement such programmes.

In 2008, AKRSP with support from Rural Support Programmes Network (RSPN) established these funds in 12<sup>3</sup> LSOs. The selection criteria were based on i) regional distribution, ii) willingness and capacity of the LSOs to accept and implement the CRF idea, iii) remoteness and prevalence of poverty in the selected LSO jurisdiction based on AKRSP's previous experience working in the area and iv) activeness of women in women organizations. An initial grant of CAD \$ 10,000 was provided to each of the 12 LSOs, (i.e., a total of CAD \$ 120,000) to enable each to establish a community-based revolving fund. At present the value of all funds is CAD \$190,000. These funds are available to 2,000 beneficiaries, of which 1506 are women. AKRSP field staff and anecdotal reports indicate that the LSOs have managed the CRFs well and have mostly followed the Terms of Partnerships (ToPs) signed between individual LSOs and AKRSP.

Based on this successful experience, AKRSP proposes to establish a dedicated CHRF in the LSOs operating in the four targeted MCCA districts of the Gilgit-Baltistan Province i.e. Gilgit, Hunza-Nagar, Ghizar and Astore. The CHRF will serve as a dedicated MNCH related health product. Compared to existing financial products available in the local market, the CHRF is expected to significantly reduce the time required to access finance for routine cases. The second element of the CHRF will be to respond to emergency cases by establishing a small reserve fund at WOs.

### **iii) Main Objectives of CHRF**

The primary objective of the CHRF is to facilitate access to maternal, neonatal and child health services by creating a sustainable financing mechanism at the LSO level.

Specifically, the CHRF will:

- Encourage poor and vulnerable families to access MNCH services at the local level.
- Ensure availability of easily accessible financial products for women to facilitate financial access to essential MNCH services
- Increase products and services provided by LSOs to their constituent grassroots level organizations.

### **iv) The Framework for CHRF:**

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<sup>3</sup> Out of the 12, only six LSOs are in Gilgit region, where the MNCH project operates. These six LSOs will also be considered for CHRF fund as the current CRF is mainly for agri inputs, enterprise and asset creation, and it does not cater to the health loan portfolio directly

The amount contributed to the revolving fund in each LSO will be CAD \$10,500 (PKRs one million). An additional amount of CAD \$1950 will be given to each LSO to establish a reserved fund at WO level to respond to needs of CHRF members, especially ultra-poor, for emergency MNCH care. The first year of the project is of great importance as it will shape the program directions for the upcoming years. Close monitoring and on-going feedback will help LSOs make mature decisions about the model.

The selected grassroots level organizations will mainly be responsible for the implementation of project activities. LSOs will ensure institutional arrangements and develop mechanisms by establishing a health/management committee headed by the BoD member, terms & conditions, mark up rates and maximum amount of loan for each application

The following steps will be taken into account while establishing the revolving fund at the LSO level.

#### **Step 1**

An estimated amount required to run the CHRF fund project is CAD \$ 262, 592 (PKR **24,946, 250**) including one year operational cost and the revolving fund. AKF(P) will sign an agreement with Aga Khan Rural Support Program (AKRSP) and transfer a total amount of CAD \$ 262, 592 (PKR **24,946,250**) to AKRSP for smooth implementation of the project in the first year.

#### **Step 2:**

AKRSP has identified and agreed with AKHSP the geographical areas for the programming around the revolving fund. Accordingly, AKRSP has also identified the institutions (LSOs/WOs) for the implementation of the project and will also provide technical and institutional backstopping to these institutions once the project starts. Through a formal TOP, AKRSP will transfer the CHRF amount to these 15 LSOs identified by AKRSP and AKHSP. AKRSP will also monitor the progress and its impact on poor women and children. AKRSP will train a staff to monitor and backstop the project implementation. The social organizers, based in AKRSP's Area Offices, will also take care of project activities as part of their on-going job.

#### **Step 3:**

The selected community-based organizations, LSOs and WOs, will mainly be responsible for the implementation of project activities effectively and efficiently. LSOs will ensure institutional arrangements are in place and develop mechanisms of CHRF operation by establishing a health/management committee headed by a BoD member. The committee

will report directly to the Chairperson of the LSO and will share progress and lessons learned periodically with the BoD. The BoD will approve the recommendations of the committee on mark-up and loan appraisal, approval and recovery period, etc. The loaning process is expected to start from the first week of the project's 3<sup>rd</sup> month in operation. In the first two months staff hiring, orientation sessions and formal TOP signing will take place.

#### **Step 4:**

The Health Management Committee (headed by the portfolio member of board and selected members from general body) in consultation with WOs will:

- 1) Initially identify poor and very poor household by using a PRA technique "wellbeing ranking" and this will be cross-validated. In most of the cases, LSOs and V/WOs have such information regarding the poorest households in the area. In addition, meetings will be arranged at V/WOs level to identify the poorest households<sup>4</sup>.
- 2) Develop mechanism on loan appraisal and loan approval and mark-up. Share and get feedback from LSOs, BoD and WOs.
- 3) Mark-up ranges from a minimum of 5% per annum to a maximum of 10% for poor and very poor respectively<sup>5</sup>. Other than the poor, LSOs may provide loans on market rates to other families but only for MNCH related services<sup>6</sup>.
- 4) In the first year, it is suggested to initially utilize only 50% for loaning and invest rest of 50% amount as Term Deposit Receipt (TDR). Based on the learning during the course of the project implementation in the first year, the LSO Board will decide about the size of the loan amount and the amount to be kept as TDR for the next years.
- 5) The Committee will review progress/lessons learnt quarterly/annually and make necessary changes to the terms and conditions of funds utilization.

#### **Step 5:**

Each LSO will conduct a lesson learnt exercise annually and review the progress quarterly. The LSO will ensure necessary adjustments in the Health Management Committee annually. After the completion of year one, a lessons learned exercise will also be arranged at the regional level.

Once the CHRF is established in LSOs, for non-emergency cases of availing MNCH services, the applicant will have to submit the request to relevant V/WOs. V/WOs committee/members will assess the application according to the criteria set by LSOs and V/WOs during identification of beneficiaries/poor households in their jurisdiction. On the approval of the loan by the committee, LSO staff will provide the loan to the applicant not

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<sup>4</sup> One of the options was to use BISP survey data that had been carried out two years ago. AKRSP feels that this may not show the true reflection of current poverty status therefore more reliable data will come from V/WOs.

<sup>5</sup> Currently market is charging 18%-22% service charges while loans are not readily available for people with weak financial background

<sup>6</sup> In 12 LSOs which have already managed such a fund, some LSOs have practiced different services charges for new and existing business. It is therefore suggested to pilot different service charges for different financial background people



later than two days of the loan application. The loan will be payable in a period of one year and rates will be decided by the LSOs Board/Health Committee in consultation with V/WOs as described under point 4.

In order to respond to emergency cases, LSOs will establish a small reserve fund at WOs level. As WOs mostly operate at sub-village level, LSO will select the most active WO in each village. The mechanism to access to emergency fund will be kept simple notwithstanding the fact that it may vary from LSO to LSO according to the geographical and economic conditions of the area. The broader features of the emergency reserve fund at WOs could be:

- WOs will have the list of poor household of the village as described in the step 4 of this framework. WO will keep this fund in safe custody within the village and will ensure to make funds available on an emergency basis.
- Immediate family members of the poor household may contact their WO President/Manager who will then issue the funds immediately after the consent of the WO loan committee will establish a proper mechanism to manage emergency loans.
- The emergency fund will not be kept in the bank; rather the manager of the WO will be responsible to ensure safety of loan amount by keeping it in safe custody and the loan committee of the WO will be responsible for the loan payments to the LSOs. Loan repayment will be started from the 2nd month.
- If there is any critical case, loan could be written off with the consensus of WO loan committee and LSO members. However; it will be the responsibility of the LSO/WO to mobilise funds from better off household within the village to rebuild the reserve funds after such write offs.

## **v) Methodology**

Before the start of the health financing activities, AKRSP will arrange a series of orientation sessions with the LSOs. During these orientation sessions, objectives, needs and methodology of the project will be shared with the staff and management of LSOs. These objectives and processes will further be shared with the members of V/WOs by the LSOs staff and management.

AKRSP and LSOs management are fully aware of the importance of V/WOs in this process. They are the basic unit of the participatory development and women's decision-making and governance in the model and will play a pivotal role during all the processes, including:

- from the identification of deserving households
- to the recovery of loan and
- to set the interest rate and other loan related issues

According to the need/requirement in their jurisdiction such as:

- prevalence of poverty,
- access to financial institutions,
- interest exemption for the poorest households or
- Relatively higher interest charges from well-off households as compared to others in the vicinity.

LSOs are also aware of the importance of sound record maintenance, book-keeping and accounting systems for the success of the project. For this purpose, a dedicated staff will be hired and trained to process the loan applications and recording of loans in the established system at LSO level.

Due to the urgency of the health-related concerns, the loan application will be reviewed and approved or denied within 2 days for the normal cases whereas emergency cases will be dealt in the same day by the WO.

Where there is no direct coverage of LSOs, WOs can submit their resolution to the closest LSO.

## **vi) Roles and Responsibilities of Partners**

### **1) Role of AKHSP/MCCS Project**

- a. Identify the priority areas for project implementation in consultation with AKRSP
- b. Provide technical guidance on defining MNCH package
- c. MCCS pro-poor officer will work closely with Health Committees of LSOs
- d. Provide MNCH services to the insured population

### **2) Role of AKRSP**

- a. Identification LSOs
- b. Provide technical and institutional help to LSOs
- c. Monitor the project implementation processes/activities and the immediate to medium-term results

### **3) Role of Local Support Organizations**

- a. In consultation with V/WOs, LSOs will identify the poor and ultra-poor for loans to avail emergency health care
- b. Designate a portfolio member in each LSO board and form the loan committee (s) at the LSO and WO level
- c. Develop institutional mechanisms for accessing loans: requests, approvals, disbursements and recovery
- d. Sign a TOP with the selected WOs in their jurisdiction and transfer the defined reserve fund amount to the WO for emergency loaning

- e. Provide reserve funds to their member WOs for emergency health loans
- f. On recommendation of WO committee, LSO may write off loan to the destitute who will not be able to pay back the loans
- g. Follow-up and monitor loaning systems at the WO level
- h. Regular meetings with the committees and provide feedback
- i. Monitoring of loans utilization and impact on poor families
- j. Review the progress at the end of the year and make the necessary changes in mechanism and framework
- k. Provide progress report to AKRSP on monthly basis

#### **4) Role of Women's Organizations**

- a. Assist in the identification of the poorest of the poor and poor families
- b. Manage reserve funds to handle emergency cases
- c. Ensure timely availability of loans for emergency cases
- d. Provide emergency loans to poor households within their jurisdiction
- e. Monitor and manage emergency loans
- f. Responsible to recover emergency loans
- g. Assist LSO in monitoring utilization of loans and impacts
- h. Proper record keeping of loans at WO level and provide monthly progress to LSO

### **vii) Proposed Activities**

The following activities will be undertaken under the proposed project:

#### **1. Hiring of Staff**

At least one staff will be required in AKRSP's regional office to monitor overall activities of the project for a period of one year. One staff is required at each LSO to process the application and recording application in the existing accounting system and for overall monitoring of the process.

#### **2. Orientation Sessions with LSOs Staff & Management**

Before the start of proposed interventions, AKRSP staff will conduct orientation sessions for the management and staff of fifteen (15) LSOs of Gilgit region. Orientation sessions will be conducted at the district level for LSOs where at least three members from each LSO will be invited to share the objectives and overall implementation strategy of the proposed activities.

#### **3. Orientation Session with Members of WOs**

LSO staff and management will hold further orientation sessions with the manager and president of WOs to share the information regarding the programme and then the managers and presidents further disseminate information to WOs members at villages

#### 4. Training

Two trainings will be conducted by AKRSP for the staff of proposed project in Gilgit. All the relevant staff from the LSOs will be trained to monitor and record the processes at the LSOs particularly accounting and book-keeping systems.

#### 5. Identify the Poorest Households

After the training of staff, poor and very poor households will be identified through FGDs and well-being ranking. These exercises will be conducted by trained LSO staff and BoD members in their respective jurisdictions. LSOs will compile the data and share it with V/WOs and AKRSP.

#### 6. Experience Sharing Workshop

Once a year cycle of loaning is complete, an experience sharing workshop will be held at GB Level for the sharing of experiences for 15 LSOs. Each LSO will also conduct similar exercise at its jurisdiction before the inter-regional exercise.

#### 7. Utilization of Community Health revolving fund:

It's recommended to invest 50% of amount in a TDR with the bank and remaining 50% should be reserved for lending instead of lending 100% amount which is much riskier. Later on management can decide how to proceed based on an assessment of the lending experience.

**Table 9. Expected Return Schedule for the Period of Twelve Months (2014)**

CHRF fund Principle Amount	Particular	Principle Amount	Bank Profit from TDR @8%	Internal Lending	Total Profit Per LSO	Total Number of LSOs	Total Return
1,000,000	TDR *	500,000	40,000		40,000		
	Ultra poor @ 5%	125,000		6,250	6,250		
	Poor @ 10%	125,000		12,500	12,500		
	Non-poor 15%	250,000		37,500	37,500		
					96,250	15	1,443,750

LSO boards will decide how the returns on the revolving fund will be used. Gender equality and proactive participation of women will be ensured in the LSOs decision on funds allocation. The general guidelines are to use the amount to expand the revolving fund and to cover the management costs from 2<sup>nd</sup> year onward. However the loan size will vary from LSO to LSO.

## **8. TARGET GROUP/BENEFICIERIES**

Direct beneficiaries of this project will be the **“Mothers and Children under 5”** of 15 LSOs jurisdiction specially the poor and ultra-poor.

Indirect beneficiaries are the households of the LSOs in the areas where the approach is being implemented.



## ***Acknowledgements***

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## ***Annexure 1: Stakeholders Consultations***



**Aga Khan Health Service, Pakistan (AKHSP)**

Maternal Care and Child Survival Project (MCCS)  
Gilgit-Baltistan

Project office near AKRSP, Al-Sabah Chowk Sonikot Gilgit

**Phone #: +92-5811-457943, 450107**

Dated: Sep 19, 2013

To,

Subject: **Consultative Workshop on Health Financing and Pro- Poor Strategy**

Dear Sir,

The “Maternal Care and Child Survival” (MCCS) Project is striving to improve the health of women and children in four districts of Gilgit-Baltistan (Hunza-Nagar, Gilgit, Ghizar and Astore). The main objectives of the project are to strengthen the Maternal Neonatal and Child Health (MNCH) and improve nutrition and infant/child feeding practices in collaboration with Department of Health (DOH) Gilgit-Baltistan.

One of the key components of this project is the health financing and pro-poor strategy. Through this component the project will support the ultra-poor families in the targeted communities and this will ensure utilization of MNCH services by the poorest families.

In this regard a half day consultative workshop is organized by the MCCS regional office Gilgit-Baltistan. The objective of the workshop is to devise a strategy for financial protection inclusive of the community members living below poverty line. Our aim is to involve the key stakeholders to highlight the role of financial barriers in determining the demand of MNCH services. The wider consultation of the workshop would enable us to develop a viable health financing mechanism in consultation with the involvement of the local communities for greater financial sustainability and ownership. This workshop will be held on 30<sup>th</sup> September, 2013 at *Serena Hotel Gilgit* at 10:00 am.

You are cordially invited to attend this workshop and enrich the mutual learning process. Program of the workshop is attached please.

Looking forward

**XYZ**

**MCCS, AKHSP**

**Gilgit-Baltistan**



**Consultative Workshop on Health Financing and Pro- Poor Strategy**

*Monday 30<sup>th</sup> September, 2013 at Serena Hotel Gilgit*

**Program (Inshallah)**

<b>Registration</b>	<b>09.00-09.15 am</b>
<b>Recitation of Holy Quran</b>	<b>09.15-09.30 am</b>
<b>Introduction of the participants</b>	<b>09.30-09.45 am</b>
<b>Background of the project and introduction to the workshop</b>	<b>09.45-10.00 am</b>
<b>State of maternal and child health in Gilgit Baltistan</b>	<b>10.00-10.15 am</b>
<b>Tea Break</b>	<b>10.15-10.30 am</b>
<b>Financial protection for maternal and child health International and regional best practices &amp; way forward</b>	<b>10.30-11.00 am</b>
<b>Group Work</b>	<b>11.00-12.30 pm</b>
<b>Group 1: Communities' role (Participants from LSO/VO/WO, religious leaders and community members)</b>	
<b>Group 2: Healthcare provision (Participants from health providers in public, NGOs and private sector)</b>	
<b>Group 3: Sustainability of the pro-poor scheme (Participants from rural support programs, MNCH project, MCCS project etc.)</b>	
<b>Group Presentation</b>	<b>12.30-01.15 pm</b>
<b>Conclusion and way forward</b>	<b>01.15-01.30 pm</b>
<b>Lunch and prayer break</b>	<b>01.30-02.00 pm</b>

## Group Work

### **Group 1: Communities' role in healthcare financing scheme inclusive of poor and ultra-poor for Mother and child health services**

#### **Group Participants: LSO/VO/WO, religious leaders and community members**

Questions for brainstorming and recommendation

1. What criterion is to be used to rank community members according to their economic/wealth status?
2. What are the prospects of establishing principles of solidarity for resource generation and risk pooling: cross subsidization from rich to poor, healthy to ill and working class to dependents?
3. How the community would carry out financial management of the pro-poor healthcare financing scheme?
4. How community would ensure accountability, sustainability and transparency of such scheme?
5. How the grievances of the community will be addressed?

### **Group 2: Healthcare provision under the health care financing scheme inclusive of poor and ultra-poor for Mother and child health services**

#### **Group Participants: Health providers and medical practitioners in public, NGOs and private sector**

Questions for brainstorming and recommendation

1. What are the common maternal and child healthcare needs in Gilgit Baltistan and its seasonal variation in different geographical areas?
2. What kind of services should be included in the benefit package/ services package of the scheme?
3. How medical practice for MNCH services could be standardized?
4. Are there any clinical guidelines/ protocols for the MNCH services at three-tier healthcare system that could be adopted for the healthcare financing scheme?

### **Group 3: Sustainability of the health care financing scheme inclusive of poor and ultra-poor for Mother and child health services**

#### **Group Participants: Representatives of rural support programs, MNCH project, MCCS project etc.**

## Questions for brainstorming and recommendation

1. What would be resource generation strategy and financial management of the HCF scheme considering different geopolitical and socio-economic characteristics in the target districts of MCCS project?
2. What measures should be taken in advance to ensure sustainability, ownership by the communities of the scheme?
3. How would the pro-poor HCF scheme for MNCH services manage competition from private insurance providers?
4. Would the scheme be able to contribute towards progress on maternal and child health indicators in the target areas/communities? i.e. Health effect of the healthcare financing
5. What could be the piloting strategy of the scheme?

**Aga Khan Health Services, Pakistan- MCCS Project**  
**Consultative Meeting on Healthcare Financing and Pro- Poor Strategy**

**List of Participants**

**Venue: Astore**

**Date:**

**29/09/2013**

**Total Participants: 15**

**Male: 12**

**Female: 03**

<b>S . No</b>	<b>Name</b>	<b>Designation</b>	<b>Dept./Organization</b>	<b>Contact #</b>
1	Ibrahim	Area Manager	AKRSP	0344540 4557
2	Kifayat Din	Manager	KRSP	0355520 5711
3	Jamsheed Ali	Chairman	DRSP	0355535 5258
4	Atiq-ur-Rehman	Member	KRSP	0355520 1250
5	Fazal-ur-Rehman	Chairman	ARSP	0355560 5220
6	Muhammed Shuaib	Member	ARSP	0355412 7244
7	Niamat-u-Din	Member	ARSP	0323928 8626
8	Muhammed Essa	G. Secretary	VHC	0355572 7403
9	Ghazala Ispani	SM	MCCS	0355518 3014
10	Nasima	L.H.S	National Programme	0355145 4759
11	Ghazala Begum	C.H.S	National Programme	0355510 9609
12	Fazal Karim	Project Officer- Pro-poor	AKHSP-MCCS	0345497 260
13	M.Ashar Malik	HCF Consultant	AKU	0333913 9353
14	Ali M. Faizi	District Coordinator	AKHSP-MCCS	0346300 0808
15	Wilayat Ali Sadiq	Adim & Finance	AKHSP-MCCS	0355510 1613

**Aga Khan Health Services, Pakistan- MCCS Project**  
**Consultative Workshop on Healthcare Financing and Pro- Poor Strategy**

**List of Participants**

**Venue: Gilgit**

**Date: 30/09/2013**

**Total Participants: 18**

**Male: 12**

**Female: 05**

<b>S . No</b>	<b>Name</b>	<b>Designation</b>	<b>Dept./Organiza tion</b>	<b>Contact #</b>
1	Dr.Arslan	Programme Officer	AKF-P	0300980 9991
2	Dr.Farman Ali	Project Manager	AKHSP-MCCS	0355517 9918
3	Shama Ial	Chairperson	LSO Danyore	0332523 8453
4	Dr. Neelum Jehan	Consultant Gynecologists	AKHSP	0334358 8525
5	Dr. Khair-ul-Hayat	Pediatrician	AKHSP	0323991 3260
6	Dr.Shabir Hussain	Assistant Director	MNCH	0345520 8612
7	Ghulam Murtaza	V. Chairman	LSO Rahimabad	0313546 0494
8	Muhammed Yasin	Nutrition Officer	MCCS	0346923 9299
9	Muhammed Ayub	Finance Secretary	Dubani LSO	0355540 7217
10	Ahmad Karim	APO	AKSWBP	0355515 6838
11	Ashiq Hussain	Manager	HDO	0346923 8055
12	Fayaz Karim	PO-MER	MCCS	0341560 2087
13	Fazal Karim	PO-Pro-poor Approach	MCCS	0344549 7260
14	Raja M Nazim	Audit Officer	Zakat & Usher Dept.	0355555 5086
15	Sosan Aziz	Project Officer-Gender	MCCS	0346536 8403
16	Rehana Bashir	DFS	MCCS	0346314 8668
17	Meher Aftab	District Coordinator	MCCS	0346954 7208
18	Azfar Ali	M&E Officer	AKRSP	0312993 5123

**Aga Khan Health Services, Pakistan- MCCS Project**  
**Consultative Meeting on Healthcare Financing and Pro- Poor Strategy**

**List of Participants**

**Venue: Gulmit Gojal**

**Date:**

**01/10/2013**

**Total Participants: 23**

**Male: 17**

**Female:**

**06**

<b>S . No</b>	<b>Name</b>	<b>Designation</b>	<b>Dept./Organizat ion</b>	<b>Contact #</b>
1	Abdul Rasheed	Chairman	GOLSON/MASO	0344541 9831
2	Muhammad Zaman	Director	GRSO	0344536 2846
3	Saif-u-Din	Secretary	GOLD	0344885 6440
4	Ghulab Shah	Director	MASO	0344949 4366
5	Bibi Safoora	SM	GRSO	0342507 5855
6	Lola Begum	Director	MASO	0341899 0873
7	Malika Begum	Director	MASO	0343892 6319
8	Malika	Health Educator	AKHSP-ECHO	0344509 7205
9	Bibi Miraj	Director	MASO	0347531 8244
10	Majeed Ullah	Accountant	MASO	0344950 7181
11	Aziz Karim	Director	CLSO	0344953 9061
12	Wazeer Saeed	V.Chairman	SNT	0344544 5730
13	Abdul Majeed	Dispenser	DOH	0346507 4640
14	Wahab Ali Shah	Member	SNT	0345534 3934
15	Naibul Shah	Director	GOLSON/MASO	0344949 5650
16	Dr. Khadija	Doctor	AKHSP	0346608 7589
17	Muhammad Ashar	HCF Consultant	AKU	0333913

7	Malik			9353
1	Fazal Karim	PO-Pro-poor	AKHSP-MCCS	0344549
8		Approach		7260
1	Dr. Arslan	Programme	AKF-P	0300980
9		Officer		9991
2	Khuram Shah	Director	MASO	0344527
0				8159
2	Saleem Haider	Director	MASO	0346232
1				9019
2	Imran	Member	MASO	
2	Shah Jahan	G. Secretary	MASO	0343512
3				8835

## Annexure 2: Proposed Detailed Budget for Community Health Revolving Fund for the Period of Twelve Months

S.NO	Particulars	Unit	No.	Unit Cost/ year PKR		Donor Share PKR	Total Estimated Cost PKR
<b>Operational Cost at AKRSP Level</b>							
1	Staff at AKRSP Level*	Person	1	500,000		500,000	500,000
2	Office Rent	Months	10	10,000		100,000	100,000
3	Communication	Months	10	6,000		60,000	60,000
4	Vehicle (Fuel, Maintenance etc.)	Months	10	65,000		650,000	650,000
5	Staff travel	Months	10	23,000		230,000	230,000
				<b>604,000</b>		<b>1,540,000</b>	<b>1,540,000</b>
<b>Operational Cost at LSO Level</b>							
1	Staff at LSO Level**	LSO	15	80,000		1,200,000	1,200,000
2	Office Rent	LSO	15	18,000		270,000	270,000
3	Communication	LSO	15	10,000		150,000	150,000
4	Stationary	LSO	15	5,500		82,500	82,500
5	Travel	LSO	15	20,000		300,000	300,000
				<b>133,500</b>		<b>2,002,500</b>	<b>2,002,500</b>
<b>Programme Cost</b>							
1	Community Health Revolving Fund	LSO	15	1,000,000		15,000,000	15,000,000
2	Emergency fund	WO	15	200,000		3,000,000	3,000,000
3	District Level Orientation Sessions	Sessions	4	100,000		400,000	400,000
4	Trainings	Sessions	4	250,000		1,000,000	1,000,000
5	Identification of Poor House-holds (FGD)	FGD	75	20,000		1,500,000	1,500,000
6	FGDs data Punching	LSO	15	10,000		150,000	150,000
7	Annual progress review session	Sessions	15	23,500		352,500	352,500
				<b>1,603,500</b>		<b>21,402,500</b>	<b>21,402,500</b>
	<b>Total</b>					<b>24,135,000</b>	<b>24,945,000</b>
<b>*Staff at AKRSP Level</b>		<b>One staff will be hired for 10 month @ 50,000/- Per month</b>					
<b>**Staff at LSO Level</b>		<b>An additional Rs. 8,000/- will be paid to existing accountant/ manager whosoever is maintaining the Financial records</b>					

\*\*\* Operational costs per LSO/ year (Rs. 133,500) may appear over-running the associated income (Rs.96,250) in the first year of the project however, parallel with the organizational maturity, the said operational costs are expected to decrease in the next 5 years in the wake of lesser reliance on CHRF and increased diversification of financial dependency on other projects.



### Annexure 3: Poverty scores card (adopted from Khan & Qutub, 2011)

Variable type	Variable	PMT Scores
Demographic	Dependents 2 or less	15
	Dependents 3 or 4	10
	Dependents 5 or 6	5
	Dependent more than 6*	0
Education Head of the family	Never Attended the school	0
	Primary (class 1-5)	1
	Secondary(6-10)	3
	Above secondary level (Matric and above)	10
Education of children	No Children between 5-16 years old OR All children between 5-16 year attend school	4
	Not all children between 5-16 years attend school	3
Housing	Room residents ration $\leq 0.2^*$	0
	Room to residents ratio $>0.2$ and $\leq 0.3$	2
	Room to residents ratio $>0.3$ and $\leq 0.4$	4
	Room to residents ratio $>0.4$	12
Sanitation	Toilet flush connected to public sewerage	3
	Dry raised Latrine/ Dry pit latrine	2
	No toilet in the house*	0
Household Assets	At least one refrigerator, freezer and washing machine	3
	At least one air conditioner, air cooler, geyser or heater	9
	At least one cooking stove, cooking range or microwave	5
	At least one TV	2
	No TV	0
Household mobility	<i>Neither Motor car nor moto*</i>	0
	One moto but not car	7
	One car or one car with motos	27
Live Stock	One buffalo or bullock AND at least one cow or goat or sheep	6
	Neither Buffalo, bullock nor cow, goat or sheep	2
Agriculture land holding	No agriculture land holdings*	0
	Some agriculture land but less than 12.5 acres	4
	More than 12.5 acres of agriculture land	7
*added by the author as most likely reference group in standard liner regression analysis		

## References

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- 1 Government of Gilgit Baltistan [Internet] [Pakistan] (2010-2013) Available from [http://www.gilgitbaltistan.gov.pk/index.php?option=com\\_content&view=article&id=58&Itemid=1](http://www.gilgitbaltistan.gov.pk/index.php?option=com_content&view=article&id=58&Itemid=1) [accessed on 1 September, 2013]
- 2 Government of Pakistan (2013). Pakistan Demographic and health survey 2012-13, Preliminary Report. National Institute of Population Studies. Islamabad, June 2013
- 3 Government of Pakistan (2011). National Nutrition Survey, Planning Commission of Pakistan Islamabad
- 4 Smith K.V. and Sulzbach S. (2008). Community-based health insurance and access to maternal health services: Evidence from three West African countries. *Social Science & Medicine* 66 (2008) 2460-2473
- 5 The World Bank (2011). Gilgit Baltistan Economic report, Broadening the transformation, World Bank Country office Pakistan, March 2011
- 6 Aga Khan Rural Support Program (2010). An assessment of socio-economic trend in Gilgit Baltistan and Chitral, 1991-2008. Aga Khan foundation October 2010
- 7 McGuinness E. and Mandel, J. (2010). Assessment of Health Micro insurance Outcomes in the Northern Areas, Pakistan—Baseline Report. Financial Assessment Services, June 2010. Available online [http://clients.caiters.com/wordpress/wp-content/themes/mfo/docs/Health\\_Assessment\\_Microinsurance\\_Outcomes\\_Pakistan.pdf](http://clients.caiters.com/wordpress/wp-content/themes/mfo/docs/Health_Assessment_Microinsurance_Outcomes_Pakistan.pdf) [accessed on 18 Aug 2012]
- 8 Jubilee Insurance (2008). Health is Wealth, Health Insurance Brochure. Jubilee Life Insurance Gilgit Baltistan
- 9 Group Discussions with Local support organization (LSO) in Chator Kund, Ghizar District held on 17 August 2013
- 10 Personal Communication with Mr. Manzor, head of marketing and Mr. Zahid head of Operation, Jubilee Insurance, Gilgit, on 16th August 2013
- 11 Personal communication with Mr. Farid Khan, AKRSP, Chitral on 14th August, 2013
- 12 Ripply P. (2011). Consultancy report on Community based saving group (CBSG) in Child Survival project in Chitral. Savings Revolution Inc. September 2011
- 13 Naya Jeewan Micro Insurance for the urban poor.[Internet], [Pakistan] (2007-2011). Available from <http://www.njfk.org/>
- 14 Hasan A. (2012). Nurturing new life in emerging world. Naya Jeewan Inc., December 2012

- 
- 15 Jooma R and Jalal S. (2012). Designing the first ever health insurance for the poor in Pakistan- A pilot project. *Journal of Pakistan Medical Association*. Vol 26(1); pp. 56-58
- 16 Benazir Income Support Program, Waseela-e-Sehat Fact Sheet [Internet]. [Pakistan] 2011 available from [http://www.bisp.gov.pk/si\\_health\\_insurance.aspx](http://www.bisp.gov.pk/si_health_insurance.aspx)
- 17 Pakistan Baitul Mal, Individual Financial Assistance, available on line at <http://www.pbm.gov.pk/projects/ongoing/individual%20financial%20assistance/Introduction.html> [accessed on 1 September 2013]
- 18 Ranson M. K. (2003). Community-based health insurance schemes in India: a review. *National Medical Journal of India*, 16(2), 79-89
- 19 Ranson M.K. and Sinha T et al. (2006). Making health insurance work for the poor: Learning from Self-employed Women Association's (SEWA) community-based health insurance in India. *Social Science and Medicine* :62;707-720
- 20 International Labor Organization (ILO) (2013). Micro-insurance programs involving health insurance - Grameen Kalyan - Micro Health Insurance (MHI). [Internet] 1996-2013. Available online at [http://www.ilo.org/dyn/ilossi/ssimain.viewBenefit?p\\_lang=en&p\\_scheme\\_id=1385&p\\_scheme\\_benefit\\_id=3382&p\\_geoaid=50](http://www.ilo.org/dyn/ilossi/ssimain.viewBenefit?p_lang=en&p_scheme_id=1385&p_scheme_benefit_id=3382&p_geoaid=50)
- 21 Hamid S.A. and Roberts J et al. (2011). Can Micro Health Insurance reduce poverty? Evidence from Bangladesh. *The Journal of Risk and Insurance*, Vol. 78, No. 1, 57-82
- 22 De Allegri M and Pokhrel S et al.(2008). Step-wedge cluster randomized community-based trials: an application to the study of the impact of community health insurance. *Health Research Policy and Systems* 6: 10
- 23 Parmar D and De-Allegri M et al.(2013). Do Community-based health insurance schemes fulfill the promise of equity? A study from Bukina Faso. *Health Policy and Planning*.2013. 1-9
- 24 Ensor T and Borghi J et al. (2006). Mobilising financial resources for maternal health. *The Lancet*, Volume 368: 9545; pp. 1457 – 1465
- 25 Vialle-Valentin C.E. and Ross-Degnan D. (2008). Medicines coverage and community-based health insurance in Low-income countries. *Health Research Policy and System*. 6:11.pp1-11
- 26 Ekman B. (2004). Community-based health insurance in low-income countries: a systematic review of the evidence. *Health Policy and Planning*; 19(5): 249–270

- 
- 27 Wilkinson D. and Gouws E et. al. (2001). Effect of removing user fees on attendance for curative and preventive primary health care services in rural South Africa. *Bulletin of the World Health Organization*; 79: 665–71
- 28 Personal communication with Dr. M Akram, Assistant Director Health. Department of Health. Government of Gilgit Baltistan, Gilgit Baltistan. Gilgit on 16 August 2013
- 29 Ensor T and Savelyeva A. (1998). Informal payments for health care in the former Soviet Union: some evidence from Kazakhstan and an emerging research agenda. *Health Policy and Planning*. 1998;13(1):41–9
- 30 Contech International Health Consultants (2010). Health Facility Assessment – Provincial Report, Gilgit Baltistan. Technical resource facility, Islamabad June. pp17-18
- 31 Malik, A. M., & Syed, S. I. A. (2012). Socio-economic determinants of household out-of-pocket payments on healthcare in Pakistan. *International journal for equity in health*, 11(1).
- 32 World Health Organization.(2003). Managing neonatal problems: a guide for doctors, nurses, and midwives, (Integrated management of pregnancy and childbirth). WHO. Geneva, Switzerland
- 33 World Health Organization. (1978). Declaration of Alma-Ata: International Conference on Primary Health Care, Alma-Ata, USSR, 6–12 September 1978
- 34 Government of Pakistan (2005). Pakistan: National Maternal and Child Health Policy and Strategic Framework (2005-2015). Islamabad, Pakistan
- 35 Government of Punjab. (YEAR?) Minimum Service Delivery Standards for Primary and Secondary Health Care in Punjab. Punjab Devolved Social Services Project. Government of Punjab
- 36 Betrán, A. P., Merialdi, M., Lauer, J. A., Bing-Shun, W., Thomas, J., Van Look, P., & Wagner, M. (2007). Rates of caesarean section: analysis of global, regional and national estimates. *Paediatric and perinatal epidemiology*, 21(2), 98-113
- 37 Lumbiganon, P., Laopaiboon, M., Gülmezoglu, A. M., Souza, J. P., Taneepanichskul, S., Ruyan, P., & Villar, J. (2010). Method of delivery and pregnancy outcomes in Asia: the WHO global survey on maternal and perinatal health 2007–08. *The Lancet*, 375(9713), 490-499
- 38 Ronsmans, C., Holtz, S., & Stanton, C. (2006). Socioeconomic differentials in caesarean rates in developing countries: a retrospective analysis. *The Lancet*, 368(9546), 1516-1523

- 
- 39 Falkingham, J, Namazie, C. (2002). Measuring health and poverty: a review of approaches to identifying the poor. Health system Resource Center. Department of International development(DFID), The UK
- 40 Souares, A., Savadogo, G., Dong, H., Parmar, D., Sie, A., & Sauerborn, R. (2010). Using community wealth ranking to identify the poor for subsidies: a case study of community-based health insurance in Nouna, Burkina Faso. *Health & social care in the community*, 18(4), 363-368
- 41 Beaman, L & A. Dillon, A. (2010). Do Household Definitions Matter in Survey Design? Results from a Randomized Survey Experiment in Mali. International Food Policy Research Institute, discussion paper 01009. IFPRI, Poverty, Health and Nutrition Division
- 42 Khan, S. N., Qutub, S. (2010). The Benazir Income Support Programme and the Zakat Programme A Political Economy Analysis of Gender. Overseas Development Institute, London, United Kingdom
- 43 World Bank Social Analysis Tools and methods wealth raking, Online portal on <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTSOCIALDEV/0,,contentMDK:21233901~isCURL:Y~menuPK:3291499~pagePK:64168445~piPK:64168309~theSitePK:3177395,00.html> [accessed on 23 December]
- 44 Benazir Income Support Program (2011). National Socio Economic Registry for the Social Protection Sector in Pakistan. Data Sharing Protocol, BISP, Islamabad, Pakistan
- 45 Schmit J. T. (1986). A new view of the requisite of insurability. *The Journal of risk and insurance*. Vol: 53, No: 2(Jun), pp320-329
- 46 Pannarunothai S. and Srithamrongsawat S et al. (YEAR?) Financing reforms for Thai health card scheme. *Health policy and planning*;15(3):303-311
- 47 Paolucci F. (2011). Economic Rationale for design of healthcare financing scheme(chapter 2), in Paolucci F Healthcare Financing and Insurance, Development in health economics and policy 10. Springer-Verlag Berlin Heidelberg. pp13-15
- 48 Steblay, N. M. (1987). Helping behavior in rural and urban environments: A meta-analysis. *Psychological Bulletin*, Vol 102(3), Nov, 346-356
- 49 Minkler, M., and Wallerstein, N. (2004). Improving health through community organization and community building,. In M. Minkler (ed). *Community organization and community building for health*. (2nd ed.). New Brunswick, N.J., Rutgers
- 50 Rose-Ackerman S. (1996). Altruism, nonprofits and economic theory. *Journal of economic literature* Vol. XXXIV (June), pp 701-728

- 
- 51 Lindenberg M. Declining State Capacity, Voluntarism, and the Globalization of the Not-for-Profit Sector. (1999). *Nonprofit and Voluntary Sector Quarterly* December 1, vol. 28 no. suppl 1 147-167
- 52 Needleman J. (2001). The role of nonprofits in Healthcare. *Journal of Health Politics, Policy and Law*, Vol. 26, No. 5, October
- 53 Jacobs B & Bigdeli M et al. (2008). Bridging community-based health insurance and social protection for health care – a step in the direction of universal coverage? *Tropical Medicine and International Health*. Vol: 13, No 2, pp 140–143 February
- 54 Ranson K.M. (2002). Reduction of catastrophic health care expenditures by a community-based health insurance scheme in Gujarat, India: current experiences and challenges. *Bulletin of the World Health Organization* 80 (8): 613-621
- 55 Ir P and Bigdeli M et al. (2010). Translating knowledge into policy and action to promote health equity: The Health Equity Fund policy process in Cambodia 2000–2008. *Health Policy* 96, 200–209