Executive Summary

Out-of-pocket expenditure (OOPE) and catastrophic health spending (CHS) on institutional delivery are high amongst Below Poverty Line (BPL) women across the state of Karnataka, in spite of large investment in the form of central and state sponsored schemes for maternal care. Keeping with Targets under SDG Goal 3 for Good health and well-being, by the end of 2030, Karnataka should reduce Maternal Mortality Ratio to 70, under-five mortality rate to 25 and neonatal mortality to 12 per 1,000 live births. The present study aimed at examining the magnitude and dimensions of OOPE at macro and micro levels, identifying the various sources through which OOPE was met and assessing the implications of OOPE. Maternity expenditure includes not only institutional delivery expenditure but also covers expenditure on ANCs and PNCs.

This study explored levels and components of OOPE among 2104 BPL families in five districts of Karnataka —Belgaum, Haveri in Belgaum division, Bellary in Gulbarga Division, Chikmagalur in Mysore Division, and Bangalore Rural in Bangalore Division. The survey captured OOPE data on maternal health, covering the period from the confirmation of pregnancy to the end of the post-natal period of 45 days. The expenditure data on utilization or purchase of services, such as consultations, lab tests, scanning, medicines purchase, in-kind payments, transportation and food were documented. The estimates include transactional costs made to health care staff. Overall, an effort has been made to capture the economic status of household and sources for out of pocket expenditure during maternity care. The main outcome of interest was the magnitude of out-of-pocket payments on maternal health care services in the public facilities for the reference period of 2014-15 to 2015-16.

Methodology: The study used mixed methods approach both qualitative and quantitative. Pre-tested questionnaire, was used to collect data on various components like antenatal care, delivery and postnatal care which examined the expenditure on events and purchase of services by women. At total of 2104 beneficiaries' survey were done. Parallel to this qualitative method like focused group discussion about 52 were held at the selected facility level. The health department officials at district level, block level and facility level were interviewed. Apart from this Interviews were also conducted among ASHA's and ANM's at the facility level.

Sampling: 10% of the total public health facilities in each district were selected. In order to capture the reasons for variation in OOPE across the geographical areas, 10% of the PHCs covering urban, rural and remote/ difficult areas was done. From these facilities 5% of BPL women beneficiaries (in possession of Tayicard) enrolled during 2014-15 and 2015-16 were randomly selected for detailed investigations.

Study Findings:

Beneficiary profile: The mean age of the beneficiaries at the time of pregnancy was 23.53 years. 68.44 % of the women belonged to other backward class and minorities, 23.57% belonged to scheduled castes and 7.87% belonged to scheduled tribes. 8.2% of the respondents did not have any schooling. About 62 % of the beneficiaries were homemakers, 2% of the women were engaged in small-scale business, and 2% were employed in the private sector. 0.4% of them were employed in government jobs. About 10.6% of the women were daily wage workers. Only about 10.17% of the women were working before pregnancy.

OOPE and its components and its variations: This study found that 82.67% of the respondents delivered in public institutions. The average ANC cost was INR 6021. The average delivery cost irrespective of the type of delivery was INR 8442/-, and the mean post-natal cost was INR 622/- for women who utilised public facilities for delivery. The average cost for maternity expenditure was INR 18,654/- which is slightly higher than the figures shown in the 71st round of the National Sample Survey (2014), which estimated INR 17,642/- for the southern region.

The average cost of normal delivery in public facilities was INR 6004/- with total maternity cost of INR 13,035/-. The average cost of caesarean in public facility was INR 12,478/- with total maternity cost of around INR 22,435/-. The caesarean delivery costs twice the amount of normal delivery. When we separate the transportation cost from the other expenditures, the average transportation cost constitutes INR 3911/- which is 26.67% of the overall average maternity expenditures. The delivery related transportation cost constitutes 40% of the total transportation cost. The transportation costs vary by means of transportation utilized and number of times commuted. In our sample the delivery cost was INR 0 /- for 86 beneficiaries and total maternity expenditure was INR 0/- for 4 beneficiaries. 61% of women who delivered in public facilities had catastrophic expenditures, i.e. out of pocket expenditures which exceeded 10% of their annual income.

Services like scanning are available only at taluka-level government facilities such as Sub District Hospitals. Non-availability of radiologists to perform scanning has led to a situation which forces the beneficiaries to depend on the purchase of services from the private sector, which costed INR 1871/- for 71.13% of beneficiaries. 35% women who got their blood and urine checked in the private sector spent an average of INR 621/ on such tests. Apart from this, 11% of beneficiaries also opted for thyroid check-up which averaged INR 533/-. 34% of beneficiaries who utilised public systems for delivery spent on an average INR 3290/- for medicines. Food expenditure on an average was INR 800/-. ANC happens on fixed days and it usually takes from half a working day to a full working day to complete the ANC check-up or scanning.

Transaction costs (informal payments) for service providers constitute one of the major chunks in OOPE. The informal payments vary by type of institutions, place and service providers. Majority of the beneficiaries who delivered in public institutes paid informal payments to the service providers. The informal system operational in public facilities has different rates fixed for different services, and different categories of caregivers charge separately and independently of each other. It is very difficult to measure these prevailing practices because of the individual variations; people have negotiated and paid the demanded money based on their ability. People who may potentially use the same public facility in future hesitate to talk about it due to the fear of consequences.

Financial Adequacy of schemes: The maternity benefit schemes like JSY and Prasoothi Aarike are intended to promote institutional deliveries. These schemes together contributed INR 2,000/- for eligible women. 44% of women received JSY and Prasoothi Aarike. This was not enough to lift households out of spending because the mean spending on delivery in public facilities was INR 8,441/- which was 4.2 times higher than the benefits received from the schemes. 62.49% of the women had heard about the financial incentive schemes of the government through ASHA workers, ANM workers and other sources. 91.37% felt that the financial support provided through these schemes was inadequate.

Sources for Meeting OOPE: Beneficiaries resorted to utilizing savings, borrowing from relatives or friends, availing loans from SHG/societies, and pledging gold, land or other assets to meet the OOPE. Usually, it takes 1-2 years to repay the loan availed which is also inclusive of interest.21.50% of beneficiaries who utilized private institutions and 29.57% of beneficiaries who utilized public institutions depended exclusively on loan with interest. Rest

of the options were combinations of various options like, savings, loan without interest, support from wife's house and other relatives, philanthropists and trusts.

From a health systems point of view, we observed that in our areas of study, only 35% of normal deliveries happened at the PHC level. The maximum utilisation of PHCs was in Haveri where 47% of deliveries happened in PHCs, whereas in Bangalore rural only 9% of deliveries occurred in the PHC. CHCs accounted for 13% of the delivery load and an overall 11% of Caesarean births. Taluk Hospitals (SDH) accounted for 30% of deliveries and 31% of caesarean deliveries. District hospitals (DH) accounted for 24% of deliveries and 50% of caesarean sections. A detailed account of infrastructure and man power status is provided in chapter 3, and the results of the study are discussed in chapter 4.

Our recommendations are for better performance of health systems where the majority of non-complicated deliveries would be managed at PHCs, and basic emergency services would be handled at CHC level and the rest would be escalated to district hospitals and tertiary care centres. Based on our estimates of OOPE and reasons for it, along with its variations at different levels, we recommended for increased uptake of intrapartum care (delivery load) at the lower level facilities like PHC/CHCs.The specific recommendations are to:

- Pay a sum of 100/- towards meeting the travel and food expenses during ANC visits.
- Enhance the number of deliveries in PHCs and ensure that they provide basic maternity and neonatal services.
- Improve the service availability at CHCs by converting more CHCs into FRUs and reduce the transportation and referral costs for patients.
- Have accountability mechanisms for informal payments in public facilities, which is a major component of OOPE for delivery cost. Allow the Arogya Rakshana Samithi's to get feedback from people about services which could lead to discussions about accountability. The Ombudsman (Public Health) would play a proactive role in monitoring the functioning of the facilities and suggesting systemic improvements by directly interacting with citizens, which would provide citizens' perspectives and bring their voice to the table. (Details given in Appendix)

If Karnataka is to achieve the targets of Sustainable Development Goals by 2030, there needs to be more focussed intervention on health systems as suggested above through ensuring well-trained human resources. This could lead to efficient and better performing health systems with better maternal and child health outcomes.