Impact Evaluation Analytical Report

Yemen National Social Protection Monitoring Survey (NSPMS): 2012-2013

Executive Summary

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Introduction

The Yemen National Social Protection Monitoring Survey (NSPMS) is a household longitudinal survey with a nationally representative balanced sample of 6,397 households (of an initial sample of 7,152). Each household in the balanced sample was visited on a quarterly basis over a 12-month period between October 2012 and September 2013. The survey had two key objectives: (1) to provide up-to-date data on how the poor and vulnerable have coped since the 2011 crisis; and (2) to produce evidence on the targeting of the Social Welfare Fund (SWF) cash transfer programme and to assess its impact on some developmental indicators. The NSPMS provides data on the SWF, living conditions, water, sanitation, education, child nutrition, child and maternal health, child protection, work and income, livelihoods and food security.

This Executive Summary encompasses a description of the sampling design, key indicators of the survey and findings of the SWF impact assessment.

NSPMS Sampling Design

- The design of the NSPMS nationally representative sample took into consideration the need to assess the SWF. Thus, it oversamples both the poor population as per the 2007 Yemen poverty map estimates (at the district level) as well as SWF beneficiaries and potential beneficiaries.

- The total survey sample size was set at 7,560 households, but only 7,152 household were actually interviewed in the first round. The two largest sources of attrition were due to security reasons in the governorates of Sa’ada, for which no data are analyzed in this report, and Al-Jawf, which suffered complete attrition in round 4 (July–September 2013).

- Indicators shown in the NSPMS report were calculated using the balanced sample – households that were interviewed in all four rounds (6,397 households) – and the longitudinal weights, even when reporting on a specific round.

- The balanced sample of 6,397 households corresponds to around 90 per cent of the initial sample of 7,152 households interviewed in round 1.
Social Protection – Social Welfare Fund

THE SWF EXPANSION

• The SWF is an unconditional cash transfer paid by the Government of Yemen to citizens who are temporarily or permanently unable to sustain themselves and whose families are not able to support them. It is comprised of two broad categories: (1) social categories (elderly, disabled and orphans); and (2) economic categories (unemployed male and female without a breadwinner).

• The population living in households with at least one SWF beneficiary increased from 30 per cent in round 1 of the survey (October–December 2012) to 35 per cent in round 4 of the survey (July–September 2013).

• The 2012–2013 SWF expansion was due to the incorporation of new beneficiaries into the programme. New beneficiaries were identified in the 2008 Comprehensive Social Survey (CSS) and selected through a proxy means test (PMT), but were only systematically incorporated into the programme from October 2012 onwards. In this report, beneficiaries that joined the programme before the 2008 CSS are referred to as “old beneficiaries”. The latter were not selected through a PMT, unlike the new beneficiaries.

• New beneficiaries correspond to about 33 per cent of the total number of beneficiary households.

POVERTY ESTIMATES AND AN ASSESSMENT OF SWF TARGETING

• Applying the PMT formula to the NSPMS data set yields an estimated poverty rate of 45 per cent.

• New SWF beneficiaries are poorer and more concentrated among the extreme poor than the old SWF beneficiaries and the overall population according to the PMT formula. Whereas 29 per cent of the new beneficiaries are extremely poor, only 19 per cent of the old beneficiaries fall into this category. This result suggests that the PMT formula performs better than the former subjective method when used to try to identify the extreme poor.

• However, it is still necessary to improve coverage, as 44 per cent of the extreme poor are not covered by a programme that already covers 35 per cent of the population. The persistence of the relatively high level of inclusion error – 27 per cent of SWF beneficiaries are not vulnerable or poor – can be partially explained by the failure to graduate the “old SWF beneficiaries” who did not qualify according to the PMT formula, which sums up to 273,000 cases according to the 2008 CSS.

• Despite the evidence that the PMT methodology has improved the quality of the targeting of the SWF, it has done so to a very limited extent. This is basically due to two structural factors: (1) the difficulty in disentangling the monetary poor from the non-poor using observable variables given high levels of income poverty and low levels of income inequality; and (2) the mismatch between the demographic pattern of the extreme poor and the poor and the SWF social and economic categories.

• The poor and extreme poor households have a relatively larger proportion of children, particularly aged 0-9 years, but this group tends to be underrepresented among SWF beneficiaries.

• In order to improve the quality of the targeting, it would be necessary to graduate the non-eligible SWF beneficiaries as per the PMT ranking of households.

• To make social protection more child-sensitive in Yemen, the Government could either revise the SWF categories to favour the inclusion of extreme poor families with children and/or to complement Yemen’s social protection system with an intervention that targets poor families with children (e.g., child allowance and conditional cash transfer programmes).
Household living conditions

**DURABLE DWELLINGS**
- Only 52 per cent of the household dwellings are built of durable material. This is largely due to the low incidence of durable materials to build floors (54 per cent), in contrast to the durable materials for roofing (91 per cent) and walls (86 per cent).
- In urban areas, 81 per cent of the dwellings are durable compared to 43 per cent in rural areas.
- Household dwellings in the richest quintile have a greater likelihood of being made of durable materials (88 per cent) compared to those in the poorest quintile (11 per cent).

**CROWDING**
- About 39 per cent of households have more than three persons per room (crowding). In rural areas, 45 per cent of households are crowded compared to 22 per cent in urban areas.
- About 58 per cent of the households in the poorest quintile live in crowded households compared to 10 per cent in the richest quintile.

**ELECTRICITY**
- Around 75 per cent of households have access to electricity, which includes electricity from public/private grid, cooperative and generators. About 97 per cent of urban households have access to electricity compared to 67 per cent in rural areas.
- Only 23 per cent of households in the poorest quintile have access to electricity as the main source of light compared to 100 per cent in the richest quintile.
- Electricity from the public grid (61 per cent) and kerosene lamps (18 per cent) are the main sources of light. The former is mainly found in urban areas (94 per cent), compared to 50 per cent in rural areas.

**SOLID FUELS FOR COOKING**
- Around 35 per cent of households use solid fuels for cooking. Almost half of rural households (46 per cent) use this method for cooking, compared to 4 per cent in urban areas.
- Solid fuels are largely used by households in the poorest quintile (79 per cent), compared to just 3 per cent in the richest quintile.

**USE OF BEDNETS**
- About 17 per cent of the households in Yemen use bednets. The use of bednets is more common in rural areas (20 per cent) than in urban areas (7 per cent).
- Differences between wealth quintiles are not very relevant. About 20 per cent of the poorest quintile use bednets compared to 14 per cent of the richest.

**WATER AND SANITATION**
- About 29 per cent of households have access to water inside the dwelling. In urban areas, access reaches 48 per cent of households compared to 23 per cent in rural areas.
- There are large differences across wealth quintiles: 49 per cent of the richest households have access to piped water inside the dwelling compared to 9 per cent of the poorest.
- Only 3 per cent of the population use an appropriate method to treat drinking water: 10 per cent in urban households and 1.1 per cent in rural ones.
• About 10 per cent of richest households use an appropriate method to treat drinking water, compared to 0.4 per cent of the poorest households.

• In 23 per cent of households, residents have to walk more than 30 minutes to access water, with disparities between rural and urban areas: only 4 per cent of households in urban areas compared to 27 per cent in rural areas.

• Around 28 per cent of the households in the poorest wealth quintile spend more than 30 minutes to fetch water, compared to 0 per cent in richest quintile.

• Households in Yemen in the period July–September 2012 consumed 30 litres of water per day per person. In urban areas, consumption was 52 litres compared to 23 litres in the rural areas.

• About 82 per cent of the households had soap for hand washing in the week prior to the survey between April and May 2013, with about 92 per cent in urban and 75 per cent in rural areas.

• About 62 per cent of the households in the poorest wealth quintile had soap for hand washing compared to 97 per cent in the richest wealth quintile.

• Only 53 per cent of household members have access to improved sanitation.

• The majority of urban households (92 per cent) have a proper sanitation system, compared to less than 39 per cent in rural areas.

• The use of improved sanitation facilities is nearly universal among the richest quintile (96 per cent) compared to only 5 per cent for the poorest.

Education

YEARS OF SCHOOLING AND EXPECTED YEARS OF SCHOOLING

• The average years of schooling for those aged 25 and older is very low, at four years (less than the complete primary education).

• Adult women have on average only two years of schooling compared to six years for adult men.

• Adult men in the poorest quintile have three years of schooling compared to 11 years in the richest quintile. Women in the poorest quintile have virtually no education –a half year of schooling – while women in the richest quintile have five years of schooling.

• The expected of years of schooling of a child who entered school in the 2012–2013 school year is nine years. Gender inequity is due to fall in the future as boys are expected to have two more years of schooling than girls (10 for boys and eight for girls).

NET INTAKE RATIO, GROSS ENROLMENT RATIO AND NET ENROLMENT RATIO

• As for net intake ratio, only 34 per cent of children aged six years are enrolled in basic education (39 per cent in urban areas compared to 32 per cent in the rural areas).

• The gross enrolment ratio (GER) in basic education (grades 1-9) is 82 per cent. There are large gender disparities as it only reaches 76 per cent for girls compared to 88 per cent for boys.

• The GER in basic education is much higher in urban areas (95 per cent) than in rural areas (78 per cent). Gender disparities are more striking in rural (88 per cent boys and 68 per cent girls) as opposed to urban areas, where girls reach 100 per cent GER as compared to 90 per cent for boys, but the latter difference is not statistically significant unlike the one observed in rural areas in favour of boys.

• The richest quintile has a GER in basic education of 98 per cent compared to 53 per cent in the
poorest quintile. For boys, the difference between richest and poorest quintile is 95 per cent against 63 per cent and for girls, it is even more striking, 100 per cent against 42 per cent.

- The net enrolment ratio (NER) is much lower than the GER rates: 72 per cent against 82 per cent and 24 per cent against 44 per cent for basic and secondary education, respectively.
- The NER in basic education is 83 per cent in urban areas compared to 69 per cent in rural areas.
- The NER in basic education for girls in rural areas is as low as 62 per cent, compared to 86 per cent in urban areas.
- The NER in basic education for boys, the difference is smaller: 80 per cent in urban compared to 77 per cent in rural areas.
- The richest quintile has a NER in basic education of 85 per cent compared to 48 per cent of the poorest quintile. The NER for boys reaches 83 per cent in the richest quintile against 56 per cent for the poorest. For girls, it varies from 86 per cent in the richest to 40 per cent in the poorest quintiles.
- The NER in secondary education is 24 per cent. In urban areas it reaches 41 per cent and a dismal 17 per cent in rural areas.
- The richest wealth quintile has a NER in secondary education of 45 per cent compared to 4 per cent for the poorest quintile. Among boys, the difference is 46 per cent against 6 per cent, and for girls it is 43 per cent against 1 per cent.

LITERACY

- About 14 per cent of children aged 10–14 years are illiterate. Children living in rural areas are more likely to be illiterate when compared to the ones living in urban areas, 18 per cent and 4 per cent respectively. Boys are less likely to be illiterate (10 per cent) compared to girls (19 per cent). In the richest quintile, just 1 per cent of this age group is illiterate compared to 40 per cent in the poorest quintile.
- For those aged 15 years and over, nearly half of the population (42 per cent) is illiterate (about 58 per cent for women compared to 22 per cent for men). In urban areas, the illiteracy rate for this group reaches 25 per cent, compared to 50 per cent in rural areas. In the richest quintile, 21 per cent are illiterate compared to 68 per cent in the poorest quintile.
- The literacy rate for young people (15–24 years) is 79 per cent (about 90 per cent for males and 69 per cent for females). In urban areas it reaches 92 per cent, compared to 74 per cent in rural areas. In the richest quintile, the literacy rate for this age group is 95 per cent, compared to 52 per cent among the poorest.

REASONS FOR NON-ENROLMENT

- The main reasons for children not being enrolled in school are “cannot afford to attend school” and “not interested in school”. For children aged 6–11 years, the major reason is “not able to afford school” (38 per cent), followed by lack of interest in school (32 per cent), while for older children the latter reaches 29 per cent compared to 17 per cent of the former.

ABSENTEEISM

- About 16 per cent of the enrolled students were absent more than three times in the 30 days prior to the survey. Absenteeism rates are slightly higher for girls than boys and slightly higher for younger children compared to children aged 10–14 years. Urban and richer children are also more likely to be absent from school.
- However, absenteeism due to the need to work or help with domestic chores – 11 per cent of total absences – is more likely among boys (12 per cent) than girls (10 per cent). It is also more prevalent among children in rural areas (14 per cent) compared to 6 per cent in urban areas.
- In the richest quintile, those absent due to work and domestic chores reach 5 per cent of the absentees compared to 22 per cent in the poorest quintile.
Child Health and Nutrition

CHILD VACCINATION RECORDS

VACCINATION CARDS
- About 54 per cent of children aged 12–59 months had vaccination cards in July, August and September 2013. For younger children aged 12–23 months, the figure is higher at 59 per cent, which is almost 11 percentage points higher than the percentage of children having vaccination cards in 2006 (48 per cent), according to the 2006 Multiple Indicator Cluster Survey (MICS).
- About 40 per cent of the children aged 12–23 months in the poorest quintile have a vaccination card compared to 72 per cent in the richest quintile.

VACCINATION COVERAGE
- About 70 per cent of children aged 12–23 months received the tuberculosis (BCG) vaccine at any point before the survey, about 48 per cent according to the vaccination card information plus 22 per cent as reported by the mother/caretaker.
- According to the vaccination cards, only 45 per cent of children aged 12–23 months received BCG vaccine before their first birthday.
- About 79 per cent of the children aged 12–23 months received the first dose of pentavalent vaccine (60 per cent as per the vaccination card and 19 per cent as per the mother’s history). The percentage declines for subsequent doses of pentavalent, to 73 per cent for the second dose and 69 per cent for the third dose.
- According to the vaccination cards, 60, 54 and 50 per cent of children aged 12–23 months respectively received the first, second and third doses of the pentavalent vaccine before age 12 months. Virtually the same percentages are found concerning polio vaccine.
- About 86 per cent of children aged 12–23 months received the first dose of polio vaccine (62 as per vaccination card and 24 as per mother’s history). This coverage declines to 80 and 77 per cent respectively for the second and third doses.
- The coverage for measles vaccine by age 12 months is at 40 per cent, which is lower than the rates for the other vaccines. Overall, 66 per cent of children aged 12–23 months are vaccinated against measles (46 per cent as per the vaccination card and 20 per cent as per mother’s history).
- The percentage of children aged 12–23 months who had taken all the recommended vaccines (fully vaccinated) by their first birthday, as per their vaccination cards, is quite low at only 15 per cent. The overall figure, taking into account the mother’s history and considering any time before the survey, is 34 per cent (19 per cent according to the vaccination card and 14 per cent as per mother’s history).
- There are no significant differences between male and female children with respect to receiving any of the vaccines.
- However, urban children are more likely to be vaccinated than rural children. For instance, 84 per cent of children in urban areas received the BCG vaccination in their first year of life compared to 66 per cent of children in rural areas.
- Approximately 61 per cent of children living in the poorest households had received the measles vaccine compared to 83 per cent of children living in the richest households. A similar pattern of inequity is also observed for other vaccines.

CHILD NUTRITION
- About 45 per cent of children aged 6–59 months were stunted in July–September 2013, 10 per cent were affected by wasting and 33 per cent were underweight.
- Children living in rural areas had a worse nutritional status compared to urban children for all three nutritional indicators. Around 46 per cent of the children in rural areas were stunted against 27 per cent in urban areas in July–September 2013.
• Wasting is slightly more prevalent among boys than girls. About 15 per cent of boys were found to be wasted in round 1, compared to 11 per cent of girls. This difference is smaller in round 4, with rates of 11 and 9 per cent, respectively.

• There are marked differences in the prevalence of malnutrition across wealth quintiles. In the poorest wealth quintile, 48 per cent of children were stunted compared to 20 per cent in the richest quintile (round 4). In the richest wealth quintile, fewer children (4 per cent) were wasted compared to 14 per cent in the poorest wealth quintile.

• Only 13 per cent of infants (under six months of age) were exclusively breastfed (round 4).

• Infants living in urban areas were more than twice as likely to be exclusively breastfed (31 per cent) than those in rural areas (8 per cent).

• Almost half of infants had diarrhoea in the 14 days prior to the surveys (44 per cent in round 1 and 41 per cent in round 4).

• Infants receiving only breast milk had a lower prevalence of diarrhoea (19 per cent in round 1 and 15 per cent in round 4) compared to those who were breastfed in association with the consumption of water/sweetened water (39 per cent in round 1 and 24 per cent in round 4).

• Approximately one fourth of children who had had diarrhoea were treated with some kind of oral rehydration therapy (27 per cent in round 1 and 21 per cent in round 4).

• Approximately 31 per cent of children aged 6–23 months had the minimum dietary diversity, eating food from at least four of the food groups in the day preceding the survey in round 1 (October–December 2012) and 40 per cent in round 4 (July–September 2013).

• A larger percentage of children in urban areas (61 per cent) reach the minimum dietary diversity compared to rural children (35 per cent) (round 4).

• Fewer children in the poorest quintiles (poorest, second and third) reach the minimum dietary diversity – between 30 and 40 per cent – than those in the richest quintile – between 55 and 62 per cent. However, the percentage is relatively low even among the richest.

• Adequate dietary diversity was observed in 63 per cent of children of mothers with secondary education, compared to just 34 per cent of children of mothers without any formal education.

Maternal Health

• Antenatal care coverage – considering only one visit – reached 64 per cent of pregnant women in Yemen in July–September 2013 (urban: 78 per cent; rural: 60 per cent). This represents an upward trend in antenatal care coverage for at least one visit in comparison to previous surveys (47 per cent in MICS 2006 and 41 per cent in Pan-Arab Project for Family Health (PAPFAM) 2003).

• However, coverage of antenatal care is still low based on the WHO recommendation that antenatal care should consist of at least four visits during pregnancy. Only 26 per cent of women attended the minimum of four visits in 2013 (urban: 43 per cent, rural: 22 per cent). Ten years ago, it was even lower at 14 per cent (PAPFAM 2003).

• There is a huge gap between the richest and the poorest for utilization of antenatal care. Women living in households in the richest quintile had a coverage rate of 86 per cent and around 50 per cent had the recommended four antenatal visits. By contrast, 40 per cent of the poorest women used antenatal care, but only 6 per cent had at least four visits.

• The percentage of women living within 30 minutes of a health facility who had four or more antenatal consultations was 33 per cent, compared to 10 per cent for those living one hour or more away from the nearest health facility.

• The percentage of women delivering in a health facility is quite low, at 27 per cent in 2013.

• There is a significant difference between rural and urban areas; about 46 per cent of women in urban areas have delivered in a health facility compared to 22 per cent in rural areas.
• The percentage of women in the richest quintile who had delivered in a health facility is more than five times larger than the percentage of women in the poorest quintile (57 per cent and 9 per cent, respectively).

• Only 37 per cent of the delivering women were attended by skilled health personnel during childbirth (round 4).

Child Protection

BIRTH REGISTRATION
• Only 17 per cent of children under five years of age were registered in Yemen in October–December 2012.

• About 11 per cent of the children under five years of age in rural areas had birth certificates, compared to 43 per cent in urban areas.

• The prevalence of birth registration was 22 per cent in 2006 (MICS). Thus, there was a reduction in birth registration between 2006 and 2012. This was mainly due to a decrease in birth registration in rural areas from 16 per cent in 2006 (MICS) to 11 per cent in 2013 (NSPMS).

• About 3 per cent of those in the poorest quintile had their births registered, against slightly more than half (54 per cent) in the highest wealth quintile.

ORPHANS
• About 5 per cent of children are orphans. There is no significant differences in the prevalence of orphanhood between rural and urban areas or among wealth quintiles.

CHILD MARRIAGE
• Around 15 per cent of Yemeni girls aged 15–19 years were already married by July–September 2013. This prevalence rate is down from 19 per cent according to the MICS 2006. The rate was slightly higher in rural (15 per cent) than in urban areas (13 per cent) and no major differences were observed between areas and wealth quintiles, even though both the poorest and richest quintiles seem to have a higher prevalence than the second and middle quintiles.

• About 14 per cent of women aged 15–49 years were married by age 15. No large differences were observed between urban (15 per cent) and rural areas (14 per cent). Women in this age group from the poorest quintile are more likely to be married (17 per cent) than those from the richest quintile (12 per cent), but the difference is not statistically significant.

FEMALE GENITAL MUTILATION/CUTTING
• About 14 per cent of the girls aged 0–14 years and 16 per cent of women aged 15–49 years had undergone FGM/C. The Family Health Survey conducted in 2003 showed a prevalence of 22 per cent among women aged 15-49 years, which indicates that FGM practices have decreased in Yemen.

• The prevalence of FGM/C among girls and women (15-49 years) is highest for the poorest wealth quintile (26 per cent) and declines until the middle quintile (11 per cent) and then increases in the richest quintile (14 per cent).

CHILD LABOUR
• About 21 per cent of children aged 6–14 years in Yemen were working in July–September 2013.

• The prevalence of child labour (6–14 years) is higher for girls (25 per cent) than boys (18 per cent) and much higher in rural (25 per cent) than in urban areas (5 per cent).

• The incidence of child labour in urban areas is higher for boys (7 per cent) than for girls (3 per cent) compared to rural areas, where it is higher for girls (31 per cent) than for boys (21 per cent).
• About 94 per cent of labourer children work as unpaid family workers (89 per cent of boys and 98 per cent of girls).

• About 84 per cent of labourer children aged 6-14 years work in the agriculture sector. In rural areas, 86 per cent of the labourer girls work in the agriculture sector compared to 91 of the labourer boys.

• Around 5 per cent of children in the richest quintile work, compared to 37 per cent in the poorest quintile.

• Among labourer children, 66 per cent were enrolled in school in 2012–2013. About 58 per cent of labourer boys were enrolled in school compared to 75 per cent for girls.

• Urban labourer children are more likely to be enrolled in school (87 per cent) than rural labourer children (65 per cent).

• While just 44 per cent of the labourer children in the poorest quintile are enrolled in school, almost 100 per cent of these children in the richest quintile are enrolled.

• As for children aged 6-14 years old who were enrolled in school, 16 per cent were working in October–December 2012 and 20 per cent were working in July–September 2013 (school holiday months).

• Children enrolled in school in rural areas face a much higher risk of working than their counterparts in urban areas (25 per cent compared to 5 per cent).

• In the richest quintile, about 6 per cent of the children enrolled in school were working, compared to 35 per cent in the poorest quintile.

VIOLENCE AGAINST CHILDREN

• In round 1 (October–December 2012), about 9 per cent of households reported at least one child or adolescent who had experienced a violent incident. This fell to 4 per cent in round 4 (July–September, 2013).

• Violence is more prevalent in urban areas, where about 11 per cent of households had adolescents or children subjected to at least one form of violence, compared to 2 per cent in rural areas (round 4).

• Among the types of violence that children or adolescent had been exposed, political violence affected 18 per cent of households experiencing any type of violence by the end of 2012. By July, August and September 2013, this figure had declined slightly to 17 per cent, while terrorist activities became more prevalent, at 22 per cent.

• Political violence and terrorist activities are the most prevalent types of violence (24 and 21 per cent) in urban areas, while in rural areas, the most common types of violence are tribal violence (32), car accidents (30) and terrorist activities (25).

• Around 65 per cent of mothers or primary caregivers agree that children should be beaten when they make mistakes. This figure is considerably lower in urban areas (46 per cent) than in rural ones (72 per cent).

• While about 77 per cent of the mothers in the poorest households agree that children should be beaten in case of a mistake, less than half of the mothers in the richest ones agree with it (46 per cent).

• The higher the level of education of the head of household, the lower was the percentage of mothers who agree about beating children when they make a mistake.

• Mothers or primary caregivers were asked about which method is the most effective to discipline children. About half (50 per cent in round 4) believe that reprimand is the most effective method to discipline children, followed by cursing/shouting (30 per cent) and beating (10 per cent).

• Children are subjected to physical punishment by their mothers or the primary caregivers in 66 per cent of households and subjected to verbal abuse in 74 per cent. Physical punishment against children is higher in rural areas (73 per cent) than urban areas (46 per cent).

• The prevalence of physical abuse is significantly lower among both the richest households – 43 per cent against 79 per cent in the poorest households – and those whose heads have a higher level of schooling – 57 per cent against 70 per cent when the head of household has no schooling.
Work and Income

LABOUR FORCE PARTICIPATION, UNEMPLOYMENT RATE AND OCCUPATION

- About 58.3 per cent of the Yemeni population aged 15–65 years were participating in the labour market from October 2012 to September 2013. The participation rate is higher in rural (63.4 per cent) compared to urban areas (44.6 per cent).

- The labour force participation rate is higher for males (73.5 per cent) than for females (44.3 per cent).

- The average open unemployment rate is at 9 per cent, but it hides tremendous differences across different categories. For instance, the unemployment rate is much higher for males (11.2 per cent) than females (4.2 per cent). The unemployment rate in urban areas reaches 15 per cent, compared to 7.3 per cent in rural ones. The unemployment rate is much lower for the lowest quintiles (7.4 per cent) than for the richest ones (13.3).

- Open unemployment in Yemen is an urban phenomenon that affects mainly young men entering the labour market. The unemployment rate of young men aged 15–24 years who live in urban areas fluctuates at around 30 per cent.

- About 48 per cent of workers are employed in agriculture; 75 per cent of female workers and 25 per cent male workers are in agriculture. In rural areas, 57 per cent of the working population is in the agriculture sector compared to 12 per cent in urban areas.

- The wealth quintiles show a clear pattern where individuals in the poorest quintile work more in agriculture (68 per cent) than those in the richest quintile (15 per cent).

- As a consequence of the importance of agriculture as a source of employment in the country, about 42 per cent of the workers are unpaid family members. The rest of working population is divided as follows: 45 per cent of workers are paid workers, 12 per cent are self-employed and 1 per cent are employers.

- About 86 per cent of female workers are unpaid family workers, compared to 10.6 per cent for male workers. For the latter, 70 per cent are paid workers, 17.5 are self-employed and 2.5 per cent are employers. Only 10 per cent of female workers are paid workers, 3.5 per cent are self-employed and 0.2 per cent are employers.

- In urban areas, 75 per cent of workers are paid workers compared to 38.1 per cent in rural areas. The self-employed have a relatively similar prevalence in rural and urban areas, 11.5 and 12.7 per cent respectively.

- As for wealth quintiles, the poorest (37.3 per cent) are much less likely to be paid workers than the richest (70 per cent).

- About 87 per cent of workers are in the private sector compared to 13 per cent who work for the Government.

- Yemenis work on average 34 hours per week, urban workers for 37 hours and rural workers for 33 hours per week. The poorest quintile work fewer hours (32 hours) than the richest quintile (37).

- As for the different rounds of the NSPMS, there was only a reduction in hours worked – 32 hours – in round 4 (July–Sept 2013), which is probably explained by Ramadan (July 2013).

WORK INCOME

- The monthly real average income of Yemenis with positive work income is 35,656 Yemeni rials ($165, United States dollars) at October 2012 prices; if workers with “zero income” (e.g., unpaid family workers) are included in the calculation, the average work income falls to 20,156 rials ($94).

- The average monthly work income for male workers is 36,343 Yemeni rials (31,742 including zero income) and for female workers is 28,775 Yemeni rials (3,591 including zero income).

- Rural workers’ average monthly work income is 32,624 Yemeni rials (15,945 including zero income) compared to 42,591 Yemeni rials (37,507 including zero income) for urban workers.
As for wealth quintiles, workers in the poorest quintile have lower monthly work income 23,343 Yemeni rials (11,007 including zero income) compared to those in the richest quintile 52,988 Yemeni rials (43,911 including zero income).

OTHER SOURCES OF INCOME

- The SWF transfer has the largest coverage of households among the non-work sources of income, at 30 per cent of the households on average between October 2012 and September 2013, followed by remittances (15 per cent), pensions (7 per cent) and charity (6 per cent). The other sources of income were quite residual.

- Among the residual sources of income are the income from the Social Fund for Development (SFD) cash for work programme, whose coverage was never beyond 0.5 per cent; social security; Martyrs and Veterans Fund; Agricultural and Fishery Promotion Fund; regional and/or international programmes; Disability Fund; Authority of Tribal Affairs; dividends; dowry; rent or sale of assets; and others.

- The SWF, remittances and charity transfers are relatively more prevalent in rural areas, respectively 34, 16, and 7 per cent, compared to 25, 11, and 4 per cent in urban areas. On the contrary, pensions are more prevalent in urban than rural areas, 12 per cent compared to 5 per cent.

- The SWF income has a much lower incidence in the richest quintile (16 per cent) compared to the poorest (35 per cent) and second (36 per cent) quintiles. Charity has similar pattern: 10 per cent for the poorest quintile and 2 per cent for the richest one.

- Pensions are much more prevalent among the richest (16 per cent) and very minimal at the poorest quintiles (2 per cent). The incidence of remittances is lower in the poorest quintile (9 per cent) and higher for the other quintiles, particularly the fourth one (20 per cent).

- Old SWF beneficiaries (17 per cent) have a higher incidence of remittances than non-beneficiaries (13 per cent). As for charity, the old beneficiaries have a higher incidence (12 per cent) compared to new beneficiaries (9 per cent) and non-beneficiaries (4 per cent).

- As for the different rounds of the NSPMS, there has been an increase in coverage of the SWF from 29 to 33 per cent of households between round 1 and round 4 (from 30 to 35 per cent of the population) and of remittances from 14 to 16 per cent, but the latter may be related to the Ramadan period in July 2013.

Livelihoods: agriculture and livestock

LAND ACCESS AND CULTIVATION

- About 43 per cent of Yemeni households have access to land. In rural areas, this percentage is higher, 54 per cent.

- Old and new SWF beneficiary households are more likely to have access to land (53 and 57 per cent, respectively) than non-beneficiaries (38 per cent). However, old beneficiaries are less likely to cultivate their land than non-beneficiaries and new SWF beneficiaries.

- The average area cultivated by agricultural households in Yemen is 0.5 hectare per household.

- Households in rural areas that have access to land tend to cultivate relatively more of it than urban ones (59 compared to 43 per cent).

AGRICULTURAL CROPS

- Overall, qat was the most reported crop cultivated in the last agricultural season between the survey months of January and April 2013, when more than 70 per cent of households with some agricultural production reported cultivation of this crop. Qat is followed by grains and cereals, and animal feed.

- Only 36 per cent of agricultural households have sold some of their crops from the last agricultural season. There is a clear seasonal pattern, with most of the selling activity of the last crop production reported between January and March (winter period).
Logistic regression results show that qat is by far the crop most likely to be sold, followed by vegetables and then others and fruits. Households that produce cereals and grains are much less likely to sell any of their crops, suggesting that these products are mostly used for household consumption.

The average quarterly real revenue of the crop sales for agricultural households that sold some of their production during the 12 months of the NSPMS was 151,990 Yemeni rials ($700) at October 2012 prices.

LIVESTOCK

About 57 per cent of agricultural households have livestock. On average, 23 per cent of those who had livestock had sold some of it in the three months before the interview.

The poorest quintiles (74 per cent), SWF beneficiaries and in particular the new SWF beneficiaries (77 per cent) are much more likely to report having some livestock than the richest quintiles (26 per cent) and SWF non-beneficiaries (50 per cent).

The average quarterly real revenue of livestock sales for agricultural households that sold some of their production during the 12 months of the NSPMS is less than 20 per cent of the amount reported for agriculture, about 32,230 rials ($150) at October 2012 prices.

Sheep and goats stand out as the most reported animal category and the only category which is more likely to be sold. They are also the most prevalent livestock in the country; 70 per cent of households report raising them, followed by cows and hens, which are mostly likely used either for production of dairy products and eggs or for the agricultural household’s own consumption. Cows and hens seem to follow a pattern similar to the one observed for cereals and grains for the agricultural household’s own consumption.

AGRICULTURAL INVESTMENT

Only 14 per cent of agricultural households reported buying some inputs in the past three months.

The average amount invested in these inputs was quite minimal, at 4,292 rials (October 2012 prices).

Food Security

FOOD INSECURITY PREVALENCE

The prevalence of food insecurity ranged from 23 to 31 per cent of households during the four quarters of the NSPMS. The peak of 31 per cent was observed in the first quarter of 2013.

Rural households are more likely to be food insecure, ranging from 28 to 39 per cent than urban households, varying from 16 to 10 per cent.

Nearly half of the population in the poorest quintile is food insecure, with large variations depending of the time of the year (ranging from 39 to 52 per cent), whereas fewer households in the richest quintile were food insecure over this period, and also without much variation (4 to 5 per cent).

Old and new SWF beneficiaries have higher levels of food insecurity than non-beneficiaries.

COPING WITH FOOD INSECURITY

The most prevalent actions to cope with food deprivation are consuming fewer food items, reducing dietary diversity (ranging from 75 to 90 per cent of food-insecure households), eating smaller meals (ranging from 54 to 74 per cent of food-insecure households) and reducing the number of daily meals (36 to 52 per cent of food-insecure households).

Among the severe food-insecure households, there is large variation along the four quarters of the NSPMS, with 46 per cent (October–December 2012) to 18 per cent (July–August 2013) reporting that household members went to sleep hungry because there was not enough food.
SOURCE OF INCOME TO ACCESS FOOD

- About 70 per cent of households say that salaries are one of the main sources of income to buy food. More said so in urban (83 per cent) than in rural areas (64 per cent).
- Among the food insecure (extreme and moderate), government assistance is cited by about 21 per cent of the households.
- Own production, own livestock and farm wages are only relevant in rural areas, where each one is cited by about 12 per cent of households. The relatively low prevalence for own production and own livestock in the rural areas reveals the limits of food crop production in Yemen.
- Remittances are also an important source of income to buy food, particularly in rural areas (11 per cent).
- The SWF is a much more important source of income for food purchases than remittances. Moreover, with the gradual expansion of the SWF, its importance has also grown over time. Between July and September 2013, 70 per cent of the households with some SWF beneficiary mentioned government assistance as the source of income to purchase food, up from 20 per cent between October and December 2012.

Estimation of SWF Impacts

METHODOLOGY

- There are some key limitations for the use of the NSPMS for a robust impact evaluation: (1) there is no proper baseline as the majority of the SWF beneficiaries were already receiving the SWF transfers at the time of the survey, thus one cannot compare before and after the programme for most beneficiaries; (2) the four quarters of the NSPMS do not overlap, so even if one wanted to implement differences-in-differences it would not involve the same months (quarters) in a consecutive year, which is the ideal scenario due to seasonality effects; (3) different types of beneficiaries (old and new beneficiary) and the irregularity of payments can potentially affect how households spend the cash transfers and their implications for the outcomes being measured in the NSPMS report; and (4) changes in the way some indicators were measured across rounds. Thus, it is best to interpret each of these household programme impact estimates with caution and at most as “suggestive” of potential programme effects.
- Impact estimates were calculated for all SWF beneficiaries compared to similar non-beneficiaries and, separately, for old and new beneficiaries compared to non-beneficiaries. SWF beneficiaries are called the treated group and non-beneficiaries the comparison group.

MAIN RESULTS

- The propensity score estimates confirmed that new SWF beneficiaries were more likely to be poor (as identified by the PMT) and have higher predicted probabilities of SWF receipt than the comparison group members. Similarly, the new SWF beneficiaries are also more likely to be poorer than old beneficiaries.
- Being elderly is not a statistically significant predictor of new beneficiaries, where it is one of the strongest predictors of treatment for older beneficiaries.
- The household-level impact analyses do not suggest any effects of the SWF on crowding in households, access to health facilities, food security or borrowing money.
- As for expenditures on food, we find that all of the estimated effects are positive and most are also statistically significant, particularly for old SWF beneficiaries. The fact that the estimated effects are smaller for new beneficiary households could reflect that many of these households had been receiving the SWF for a very short time before the NSPMS was administered, as well as the fact that the newer beneficiaries were poorer than older beneficiaries.
- The pattern for household expenditures on utilities is mixed, with one small, positive, statistically significant effect of the SWF on old beneficiary households’ use of the cash transfers for expenditures on utilities (electricity bills).

- As for household income and agricultural production, we find that income from work and from agricultural production are both significantly reduced among the old SWF beneficiary households. Estimates for SWF effects on land cultivation show that beneficiaries were less likely than non-beneficiaries to cultivate land, except for old beneficiaries, who were more likely to cultivate land compared to the comparison group of non-beneficiaries (statistically significant).

- New SWF beneficiaries are more likely to make investments in agricultural inputs and are also significantly more likely to possess livestock than non-beneficiaries. These impacts seem to be consistent with the implementation of the programme for new beneficiaries, who received irregular, lump-sum payments (when payments resumed by the end of 2012). For more details on the expansion of SWF, see the section at the beginning of this Executive Summary under the heading “Social Protection – Social Welfare Fund”.

- Other findings reported for livelihood outcomes reveal that old SWF beneficiary households rely less on crop and livestock sales and their own production as a main source of food with receipt of the SWF.

- There are statistically significant reductions in the probability that both boys and girls of younger (6–11 years) and older (12–14 years) ages were absent from school (in round 3 of the NSPMS when school was in session) if their households were receiving the SWF.

- Impact estimates suggest higher rates of child labour and unpaid family work for new female SWF beneficiaries ages 6–11 years (compared to non-beneficiaries) while school was still in session (round 3) and higher rates of unpaid family work for males 6–11 and 12–14 years (also new beneficiaries).

- When looking at the round 4 outcomes when children were not in school (holiday period), most of the coefficient estimates – for new and older beneficiaries and both groups combined – are positively and statistically significant, suggesting that receipt of the SWF is associated with more child labour and unpaid family work when children are not in school.

- To further investigate the patterns in child labour, the effects of the SWF on child labour and unpaid family work were estimated separately for rural and urban children. Focusing only on rural children, results show higher rates of child labour only among male SWF beneficiaries, aged 12-14 years, when these children are not in school (i.e., in round 4). For female youth (6-11 and 12-14 years) and younger rural males (6-11 years), there is no statistically significant impact for old or new beneficiaries on child labour in either rounds 3 or 4. In terms of unpaid family work, for both females and males, estimates of a higher rate of unpaid family work are only found when the beneficiaries are not in school, and particularly among new beneficiaries. Thus, for all groups of rural children, higher rates of child labour are not found among SWF beneficiaries during the school year.

- There is no statistically significant result among the estimates for anthropometric outcomes for children aged 6–59 months, including underweight, stunting and wasting (and for global, moderate and severe levels).

- Similarly, although almost all of the coefficient estimates of the impact of the SWF on vaccinations for children (age 12-23 months) are positive, only two of these estimated effects (for new and older beneficiaries combined) are statistically significant. These impact estimates suggest that receipt of the SWF may be associated with a greater likelihood of receiving the measles vaccination and all three doses of pentavalent vaccine.
CONCLUSION: RECOMMENDATIONS FOR THE SWF TOWARDS A MORE CHILD-SENSITIVE SOCIAL PROTECTION INTERVENTION

- Improving the targeting and/or the focus of the programme, especially to cover more extreme poor people with children. In any future revision of the PMT formula, the demographic composition of the household, particularly the number of children in different age groups within the 0–17 year interval, should be considered.

- The unemployed and women without a breadwinner are SWF categories whose eligibility seems harder to verify. Perhaps more important than having women without a breadwinner as a key vulnerable group would be to prioritize women as the main beneficiary (SWF cardholder) within an eligible household as per the PMT formula, even if they are not the considered within the category of women without a breadwinner. Likewise, those who were eligible because they were unemployed when they joined the SWF are not likely to be unemployed for a long spell. Thus this category should either be changed or must stay only for a shorter period in the programme as already stated (but not implemented) in the SWF legislation. The latter mandates a revision of the eligibility status for the economic categories (unemployed and women without a breadwinner) every two years, and for the social categories every five years.

- If it is not possible to prioritize the inclusion of families with children due to the current legislation of the programme and its categories, other programmes such as an unconditional child allowance or a conditional cash transfer with soft health and education conditionalities could be implemented to make Yemen’s social protection policy more child-sensitive.

- Soft conditionalities to families with school-aged children are measures that have the potential to boost the impact of the programme. The impact evaluation results suggest that special attention should be paid to younger children (due to prevalence of domestic chores) and older children (due to prevalence of child labour) when designing complementary programmes to support SWF beneficiaries. Thus, soft conditionalities can be a good instrument, as they are not implemented in a strict manner so that children who do not have access to school or health centres are not excluded from the programme. Soft conditionalities focus on the message of the programme that promotes actions that improve children’s well-being, which has been shown in other challenging contexts to be as effective (and less exclusionary) than strict conditionalities.

- The productive impacts found for new beneficiaries are suggestive that lump-sum irregular payments may trigger a different impact than the regular payment. The latter are more likely to have impacts on food consumption and security than the former.

- Based on the productive impacts found for those who received the lump sum, the Government could consider a lump-sum payment for those who are graduating from the programme due to non-eligibility as per the PMT formula and refer them to other programmes aimed at increasing productivity. This would reduce the inclusion errors of the programme and open space for the inclusion of eligible families currently not receiving assistance from the programme.

- Finally, revising the value of the benefit, which has not been adjusted since 2008, and ensuring its regular payment are important measures to ensure that the programme has its intended impacts.