

Evaluation of TUP in Pakistan – Midline Results

1. Introduction

This briefcase presents the intermediary results of the impact evaluation of “Targeting the Ultra Poor” (TUP) in Pakistan. TUP project is the replication of BRAC’s Income Generation for Vulnerable Group Development (IGVGD) program. The program targets the ‘Ultra poor’- people who have no assets and are chronically food insecure. In Pakistan, it was implemented in 2008 by four NGOs in 65 villages of the coastal areas of Sind in partnership with the Pakistan Poverty Alleviation Fund (PPAF). The NGOs are Aga Khan Planning and Building Service, Pakistan (AKPBS), Badin Rural Development Society (BRDS), Indus Earth Trust (IET) and Sind Agricultural and Forestry Workers Coordinating Organization (SAFWCO).

The principal objective of the study is to assess the impact of the TUP program on social and economic outcomes.

Program description and timing

The aim of TUP was to support the ultra poor households through training, assets transfer, health support and monthly consumption support with the intention that participants will eventually ‘graduate’ (after 18-24 months) out of extreme poverty. NGOs first carefully selected the poorest villages in their respective field areas and then selected the poorest households through participatory rural appraisal (PRA) and household surveys¹. In the second stage, public lotteries were held in each village to select the treatment and control households. Selected households then received the different components of the program².

Evaluation design and survey

At the pilot stage of the implementation of TUP, only a limited number of eligible households could benefit from the program. Among the eligible households, we randomly assigned half of the households to a treatment group and the other half to a control group. The randomization insures that the two groups are statistically identical at the beginning and that all differences found after the program between the two groups can be entirely attributed to the program. As mentioned before, randomization of the program was done at the individual level through public lotteries.

¹ To be eligible, households needed to meet at least three of the five selection criteria: no ownership of productive assets, no active male member in the households, households with income less than Rs. 25 per day, livelihood at risk and household with no member working on salaried employment.

² In terms of assets, households were given in majority animals (mainly goats) to start an economic activity. The decomposition of assets received is provided in appendix 1 figure 8. Finally, selected households were given consumption support of Rs. 1000 per/month for the first 12 months. The purpose of consumption support was to ensure the food security and secure the enterprise. The selected households were also regularly visited by the health staff and were given free medicines or health allowance for the first 12 months of the project.

A baseline survey was conducted in September 2008 on all eligible households before the public lotteries and the implementation of TUP. Table 2 in Appendix 2 shows that observable characteristics are, as expected with the randomization, well balanced between the treatment and control groups. A short consumption survey was carried out in September 2010 and a midline survey (resembling the baseline survey) was finally conducted in September 2011, one year after the end of the program. We are presenting in this briefcase the results using the data from the midline survey.

The project and evaluation timeline is the following:

Table 1 : Timeline

Identification of eligible households	Baseline Survey	Public lotteries and start of the program	Short Consumption Survey	End of Program	Midline Survey	Endline Survey
July 2008	Sept 2008	Dec 2008-Sept 2009	April 2010	May 2010	Sept 2011	Sept/Oct 2012

2. Results

The motivation of the program is that the combination of income-generating assets with consumption support, health services and skill training will allow poor households to get out of extreme poverty. The program aims at overcoming several constraints that very poor people face and keep them into the poverty trap such as the lack of physical capital or human capital, inefficient insurance strategies, the incapacity to mitigate shocks, etc.

Since TUP is a combination of several interventions we can evaluate the effect of the program as a whole but are not able to distinguish between its different components.

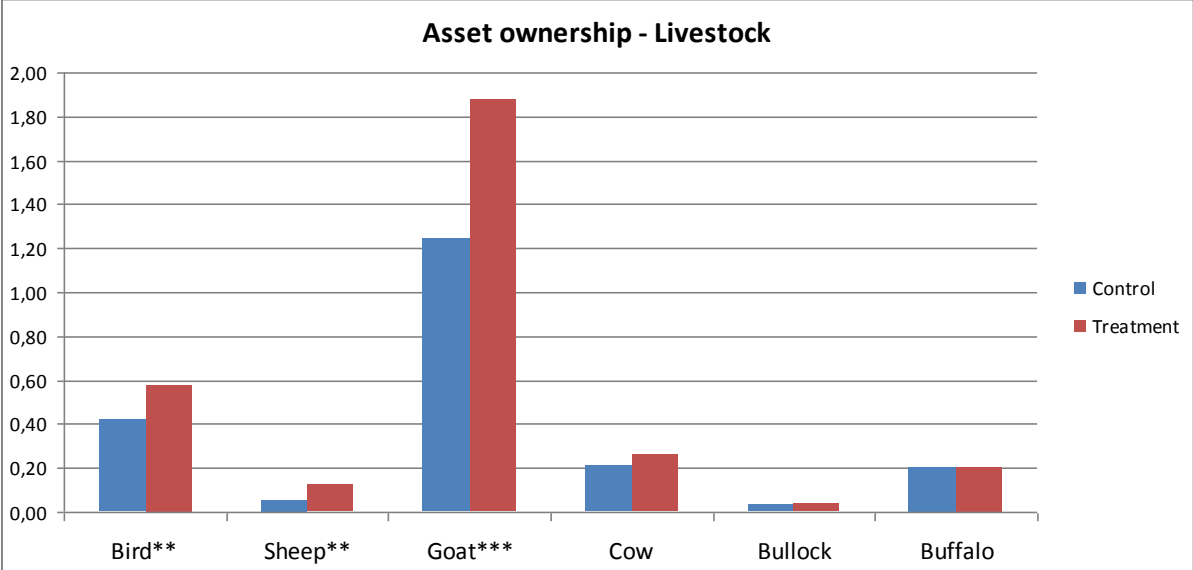
We are first presenting the results on asset ownership which is the main intermediary outcome to understand whether the program has been effectively implemented. We then look at final outcomes that are supposed to be affected by the different components of the program. We are looking specifically if TUP has an effect on occupational choice, production, income but also on poverty (proxied by the level of consumption), health and food security.

2.1 Asset ownership

Households who have benefited from the program are expected to increase their level of asset ownership. This should be one of the most direct effect of the program. Depending on what they do with the asset might affect their occupation choice, production levels, income and households consumption.

We actually see an increase in animals owned by the treated households as compared to the control. Figure 1 below shows that the number of goats owned is significantly larger³ for the treatment group (1.84) than for the control group (1.24). There is also an increase, but slightly lower, of the ownership of birds and sheep. As confirmed by the data on asset transfer (see 1-program description), goats are the main asset transferred by the different NGOs.

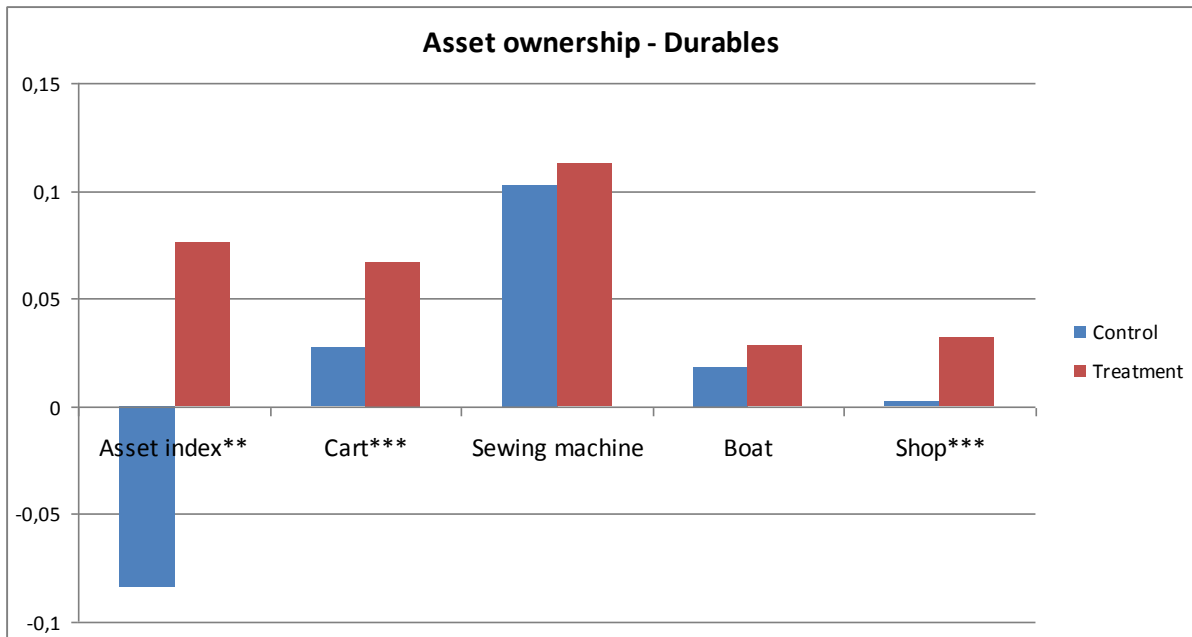
Figure 1



Moreover, we also see an overall increase of ownership of durables as shown by the difference in asset index in Figure 2. We find that assets such as shops or carts that were provided by the program to some households are more held in the treatment than in the control. However, we find that the proportion of households owning a sewing machine is the same in the two groups although it was an asset provided by the NGOs to some households.

Figure 2

³ Outcomes that are statistically different at the 1%, 5% and 10% level between the treatment and control group are respectively noted with ***, **, *

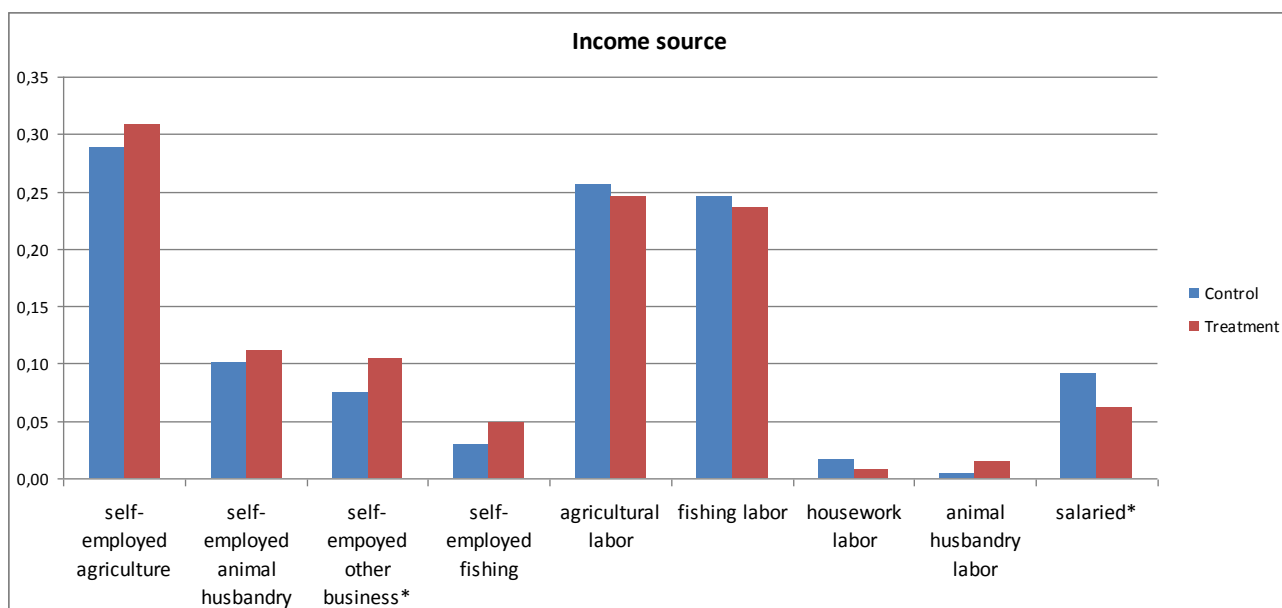


2.2 Occupational choice

The effect of the program on the ownership of productive assets does not translate at this stage on important changes on occupational choice. One would expect that providing capital to households that were initially credit constrained would allow them to start up new income generating activities. We find that treated and control households have overall the same income structure.

Figure 3 shows that households rely essentially on the agricultural sector either through self-employment (30%) or wage labor (25%) and on fishing (25%). These sources of income are statistically identical for the treated and the control group. Surprisingly there is no effect of the program on the propensity to derive income from livestock. Only 10% of the sample relies on this livestock income and there is no difference between treated and control. We find that the program affects positively the probability to derive income from non agricultural business and negatively from salaried work. However, for these two outcomes the magnitude of the effect is small.

Figure 3

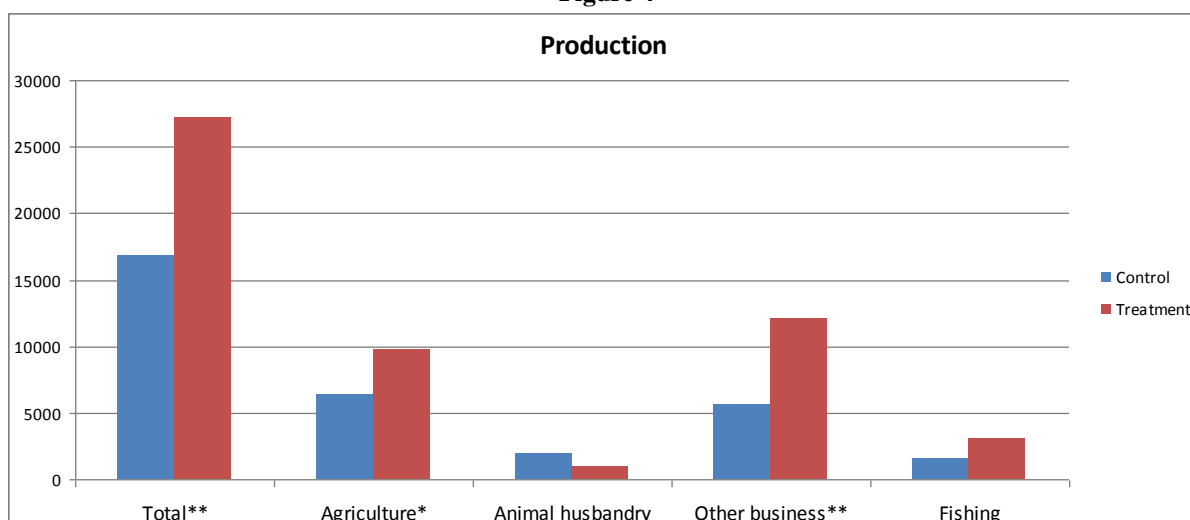


These results are coherent with the analysis on adult time use (not shown here) where we do not see any change except for the time spent tending animal. This would suggest that households spend more time on animal tending without deriving necessarily more income from it.

2.3 Production and income

Following the results on occupational choice, we find that there is an increase in production from other businesses. More surprisingly, treated households are increasing their agricultural production. The underlying mechanism behind the improvement of agricultural output is not very clear. We also find no change in the production coming from livestock. It is worth noting that only very few households – from treatment and controls – actually sold livestock in the year before the survey.

Figure 4



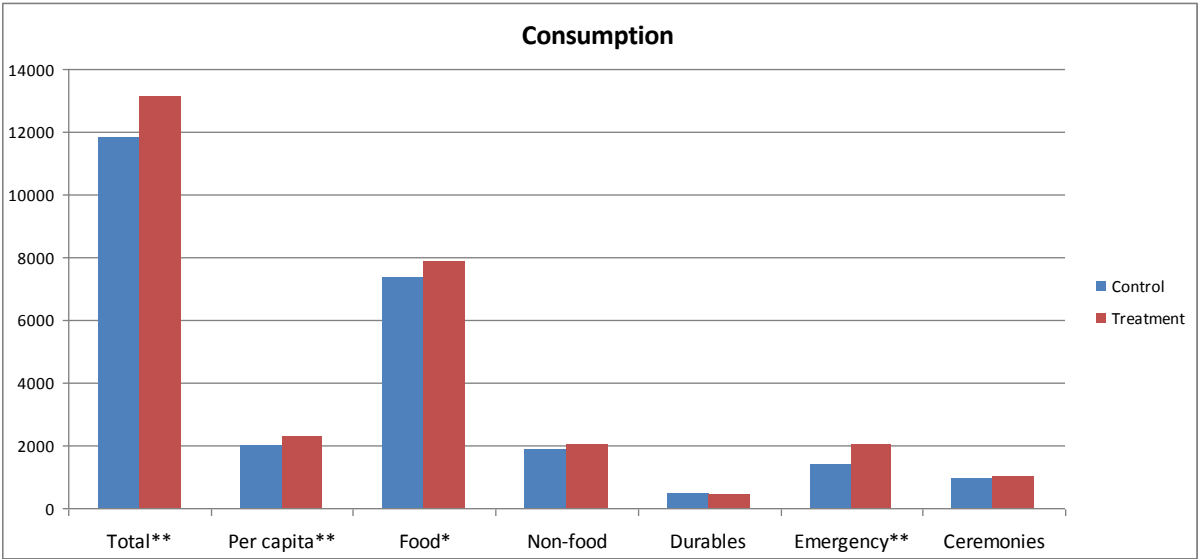
2.4 Consumption

The level of consumption, a proxy of wealth, is a central element in the evaluation of TUP. As shown by figure 5, the effect on consumption one year after the end of the program is positive and significant. Treated households consume monthly on average 1250 \$ roupies more than control households, this represents an increase of more than 10% of monthly consumption due to the program. This result suggests that the program successfully reduces poverty in the short run.

The increase in total consumption is essentially led by an increase in food and health expenses (emergency consumption). The latter result suggests that TUP beneficiaries may mitigate health shocks better than control households. We do not see however an increase in the purchase of durables.

This increase in consumption might come from different channels, either through the increase of production and profits (not well captured here) or from the other components of the program such as the health assistance or consumption support.

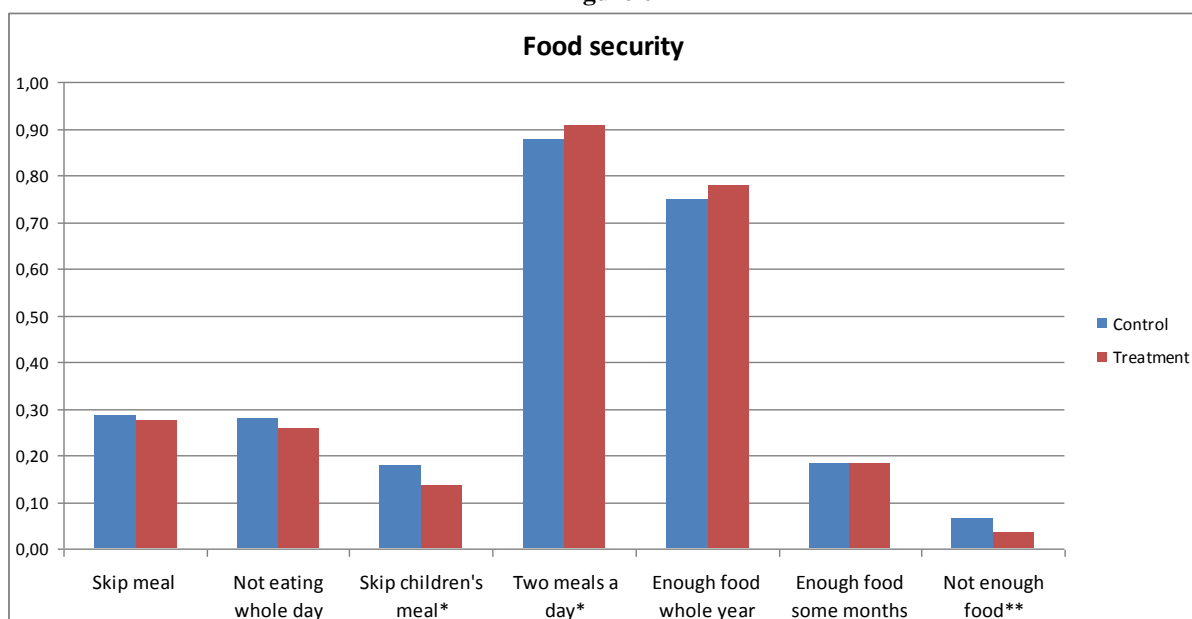
Figure 5



2.5 Food security

The program affects positively food security of treated households even if the magnitude is relatively small. Food security is proxied here by several questions on whether adult or child members skipped meals, had two meals a day or felt that they had enough food over the last 12 months. Figure 6 shows that some measures of food security have increased significantly. For example, the propensity of skipping meals for children is 4 percentage points smaller in treatment (14%) than in control (18%). These results are in line with the analysis on consumption level where we find an increase in food consumption due to the program.

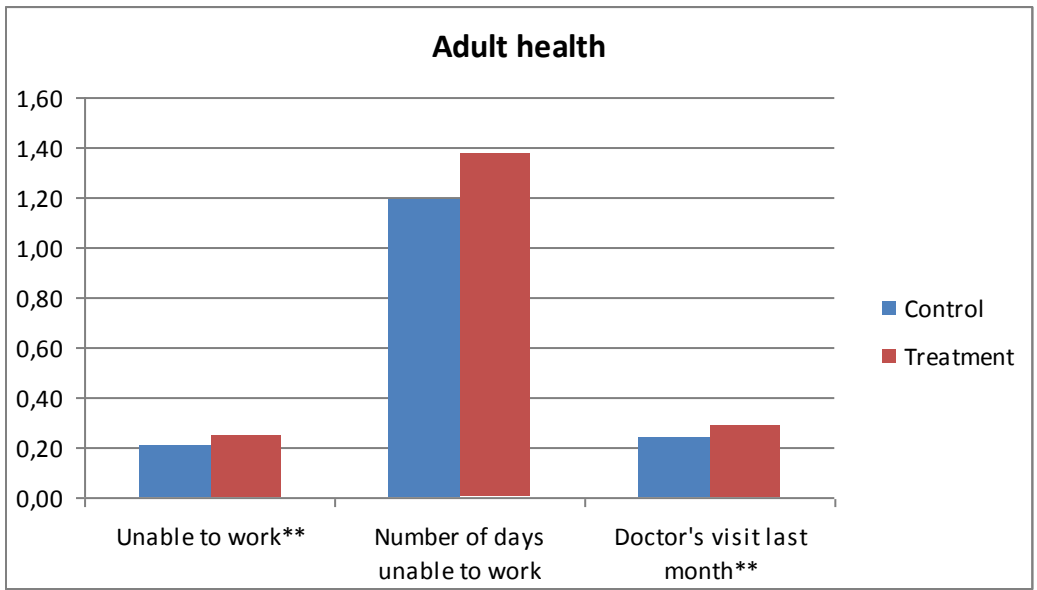
Figure 6



2.6 Adult health

Finally, the results on adult health are mixed. We find that the program led to an increase in health consumption (section 2.4) but at the same time, treated households report more than the control to have been unable to work due to health problems (figure 7) or to have experienced health events. One explanation for this result is that the health component of the program raises households' awareness on health issues and the probability of treated households to identify and report health events.

Figure 7



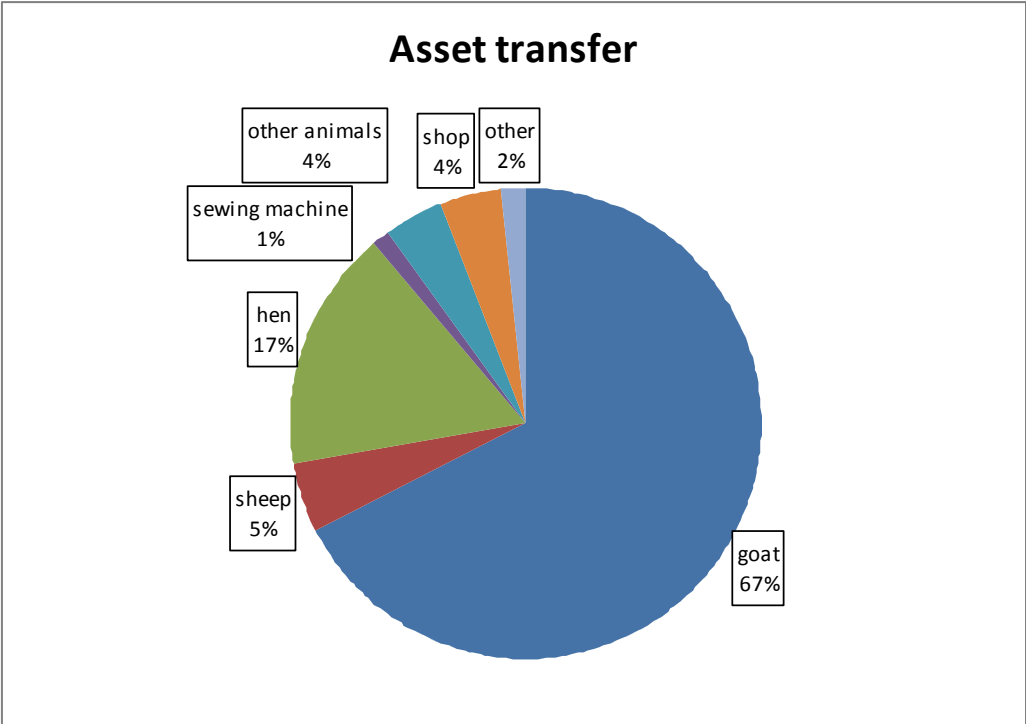
3. Conclusion

The preliminary results presented in this document shows that TUP has overall a positive effect. These benefits need an accompanying cost analysis, and the followup survey from September/October 2012, to tell the complete story. One major impact is that TUP increases significantly the level of consumption of poor households. It is not possible at this stage to unravel all mechanisms behind this effect but our analysis shows that TUP has several impacts on the living condition of beneficiaries. It allows poor households to have access to productive assets they would not have had access to otherwise. Production in the agricultural sector and from non agricultural business increases. The program affects at the margin occupational choices by increasing non agricultural business activity and reducing salaried work. Households feel that their food security has increased and the effect on health expenses is positive.

These preliminary results will be complemented with subsequent work on this wave of data and an endline survey to understand the effect at longer term.

Appendix 1: Assets transferred by the NGOs

Figure 8



Appendix 2 : Baseline Characteristics

Table 2

	Control mean	Treatment mean	Diff	p-value
Number of household members	5,84	5,87	-0,03	0,86
Percent male in household	49,30	48,53	0,77	0,46
Average age of household members	24,88	23,80	1,08	0,11
Number of adult(s) literate	0,51	0,51	0,00	0,97
Household head died in last 5 years	0,12	0,12	0,01	0,76
Number working household members died in last 5 years	0,08	0,09	-0,01	0,52
How many rooms in the house?	1,72	1,76	-0,05	0,29
How many rooms are pakka?	0,21	0,23	-0,03	0,42
How many rooms are kuchha?	1,51	1,54	-0,03	0,56
Latrine is open air	0,75	0,72	0,03	0,19
Water source: tap	0,09	0,08	0,02	0,24
Water source: well	0,07	0,07	0,00	0,79
Water source: tube	0,54	0,53	0,01	0,86
Water source: tank	0,14	0,12	0,02	0,42
Water source: water tanker	0,11	0,13	-0,02	0,38
Water source: river	0,04	0,05	-0,02	0,14
Water source: other	0,02	0,03	-0,01	0,55
Own livestock	0,40	0,40	0,00	0,94
Cultivate own land	0,02	0,02	0,00	0,62
Cultivate shared land	0,02	0,02	0,00	0,93
Total consumption	10312,44	9625,48	686,96	0,31
Consumption per capita	2036,54	1794,20	242,34	0,19
Emergency consumption per capita	394,14	259,03	135,12	0,39
Outstanding loan	0,52	0,51	0,01	0,69
Saving account	0,03	0,02	0,01	0,43
Financial situation	3,12	3,19	-0,07	0,53
Health event	2,83	2,43	0,40	0,38