

Piloting Basic Income

A Legacy Study

Final Report

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**Sarath Davala, Renana Jhabvala, Guy Standing and
Nina Badgaiyan**

SEWA Bharat and INBI

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Executive Summary

In 2012-13, an unconditional and universal basic income was tested in a pilot study carried out in a tribal village in Madhya Pradesh. The pilot covered 127 households consisting of 756 individuals, and was evaluated through comparison with another tribal village with very similar socio-economic characteristics, containing 97 households and 608 individuals.¹ In one tribal village, i.e., Ghodakhurd, for a period of 12 months, Rs.300 was paid to each adult and half of that amount to children. In the control tribal village, i.e., Bhilami, none was paid any basic income.

The complex outcomes of the pilot were evaluated by a set of three comprehensive surveys, complemented by detailed ‘case studies’.² These showed that the basic income induced a series of changes that added up to being *transformational*. In brief, the basic income had a strong positive welfare impact, in terms of living conditions, nutrition, health and schooling, and a strong economic impact, in terms of increased earned incomes, more work and productive labour and more assets. It also had both an equity impact as well as an emancipatory impact, in terms of reducing debt, increasing savings, enabling more people to respond to financial crises, and gaining the ability to make decisions for themselves.

A big question was, would the positive trends persist even after the payments stopped?

Backed by support from the Azim Premji Philanthropic Initiative (APPI) and the Omidyar Network, we have been able to conduct what we have called a *Legacy Survey* in the two

¹The tribal villages were selected following the conduct of a larger pilot covering 20 non-tribal villages in Madhya Pradesh, which adhered to a modified randomised control trial methodology, in that 8 villages were randomly selected from several hundred villages roughly equidistant from Indore in which every individual received a basic income, and the outcomes were compared with what happened in 12 similar villages also randomly selected from the original sample. The most important point about the methodology was that the selection of villages was unbiased, and not chosen with any prior expectations.

²The first, the *baseline survey*, was conducted in January 2012, the *Final Evaluation Survey* was carried out in January- February 2013;

*Tribal villages*³ four years after the end of the pilot. The same questionnaire as used in the evaluation surveys was administered and the results have been analysed using several techniques, including the difference-in-difference method. The *Legacy Survey* was carried out in January and February 2017⁴.

Bearing in mind that even one year of basic incomes had a significant impact on living standards, the results of the Legacy Survey suggest that many of specific outcomes persisted, mainly because of a *growth of income*. During the one year of basic incomes many households bought livestock and other assets. Others began to farm their small plots that had hitherto been left fallow, or cultivated on and off. Four years later these income generation activities had persisted and in some cases been strengthened.

Among other outcomes shown at the time of the pilot, the decline in alcohol consumption seems to have continued to decline. Similarly, the villagers' access to and understanding of health care had continued the improvements observed at the time, as had the attitude towards children's schooling. There was a continuing positive change in intra-household decision making. However, some families had dropped back to their previous condition, mainly as a result of health shocks experienced in the subsequent period. Similarly, men in those families tended to slip back into debt bondage as 'Naukers'.

In analysing these and other behavioural changes, we set out to consider three types of effect. These are as follows:

- **Momentum Effects.** These refer to changes that were strengthened, in the period after the end of the pilot.
- **Persistence Effects (or partial drop-back effects).** These are effects that, partially or wholly, persisted after the end of the basic income pilot, in which a statistically significant difference between the basic income village and the control village was maintained, even if it were reduced.

³The village that received basic income in 2012 was Ghodakhurd and the control village was Bhilami.

⁴ Same months as the Final Evaluation Survey was done.

- **Drop-back Effects.** These refer to where a cessation of the basic incomes led to a return to what had been beforehand, so that there was no longer any statistically significant difference between the control group and the families that had received a basic income.

As a rough summary, the table below indicates what happened to key factors, which had shown a *Pick up effect* during the year of basic Income. That is, those indicators where the effect of the basic income had been statistically significant at the end of the pilot survey in 2013.

Table 1 –Summary of Legacy Survey Results, 2017

Momentum effect (Sustained Impact)	Persistence effect (Partially sustained)	Drop-back effect (Complete Drop-back)
Declining use of alcohol	Better Electricity connectivity	
Improved woman’s (spouse’s) role in decision making in the house	More Private Drinking water	No more housing improvement
Increased Livestock	Better Nutrition	Medical insurance dropped Off
Improved incomes	Better medical care	Expenditure on schooling declined and returned from private to Government School
	More positive attitude to Schooling	Increased debt bondage
	More likely to earn income from farming as compared to wage labour	
	More likely to earn income from own- account work rather than casual wage	

Main Report

1. Introduction

Definitionally, a basic income is an economic right, a modest amount of cash paid to each individual monthly, granted permanently. If one is testing it in a pilot, obviously that latter characteristic is not possible. By definition, it is a temporary test, designed to last a few months or years. This was the reality in a pilot basic income scheme launched in Madhya Pradesh in 2011. In the larger of two pilots, nearly 5200 men, women and children, the whole population of eight villages, were granted a basic income, paid individually to each man and each woman equally, with a smaller amount paid to children, whose basic income was paid to the mother or surrogate mother.⁵ In that larger pilot, the basic income was paid monthly for a total of 17 months. What happened to the recipient individuals, their families and their communities was compared with what happened to otherwise similar families living in twelve otherwise similar villages, in which nobody received the basic income. The methodology for that larger pilot was called a modified ‘randomised control trial’ (RCT).

Shortly afterwards, a small pilot based on a similar design was launched in a tribal village, also in Madhya Pradesh. The experience of the 127 households, consisting of 756 individuals, was compared with what happened to otherwise similar households in another tribal village of a similar type in the vicinity.⁶

In both pilots, the impact and effects were assessed by a set of evaluation surveys, beginning with what was called a *Baseline Survey (BS)*, a **census** of all households that

⁵ The methodology and results are explained in S.Davala, R.Jhabvala, S.Mehta and G.Standing, *Basic Income – A Transformative Policy for India* (London and New Delhi, Bloomsbury, 2014).

⁶ Note that this was not a ‘randomised’ trial, in that the two villages were pre-selected as having similar tribal households. The important methodological point is that the pre-selection was not biased, in that there was no reason to think or expect either village would respond differently to the introduction of basic incomes and in that nothing happened to either of the villages that would have altered the environment. As far as the selection of individuals or households, this was not relevant since the whole community was selected in one village and the whole excluded from receipt in the other. In a social policy experiment, random selection of individuals in a community is a form of bias, since ‘network effects’ matter and forms of retributive justice could occur, in which recipients of the policy put pressure on others to share in some way. For strong criticisms of the RCT methodology, see the work of economists and Nobel laureates Angus Deaton and James Heckman. One point that Deaton has emphasised is that it is impossible to randomise by unobservables.

assessed their status, living conditions, economic conditions and so on, conducted just before the launch of the pilot. Then, after approximately six months, an *Interim Evaluation Survey (IES)* was conducted. After twelve months, a *Final Evaluation Survey (FES)* was conducted. In the tribal villages, the pilot lasted twelve months, in the larger pilot it lasted seventeen months.

In both cases, it was decided to consider what happened a few months *after* the basic incomes ceased, and accordingly a *Post-Final Evaluation Survey (PFES)* was conducted, this being restricted to households in the villages where the basic incomes had been paid.

While a pilot is necessarily time-bound, it is worth emphasising that this project was the first pilot of an unconditional basic income in India, and actually *one of the first in the world to respect the principles of a basic income*. The money paid out was not *targeted*, that is, paid only to those who were designated as poor; it was paid to everybody who was registered as usually living in the community at the outset, implying a form of *universality*. The money was paid *unconditionally*, that is, it did not require or even encourage people to spend the money in any particular way. How the money was spent was left to the recipients to decide for themselves. And it was paid *individually and equally*, i.e., it was paid to each man and to each woman with equal amounts for each person, and half to children below eighteen years old.

The results are presented elsewhere. Very briefly, as revealed by the evaluation surveys, complemented by one hundred detailed ‘case studies’, they showed that the basic incomes induced a series of changes that added up to being *transformational*.⁷

Thus, on the basis of various statistical indicators, the basic incomes had a positive welfare impact, in terms of living conditions, nutrition, health and schooling. They also had a positive economic impact, in terms of increased earned incomes, more work and productive labour and an increase in assets.

⁷S.Davala, R.Jhabvala, S.Mehta and G.Standing, *Basic Income – A Transformative Policy for India* (London and New Delhi, 2015).

They also had a strong equity impact, in reducing social and economic differences between men and women, upper and lower castes, the disabled and others, and so on. And, perhaps most interestingly and largely unanticipated, they had an emancipatory impact, reducing debt, increasing savings, enabling more people to respond to financial crises without plunging into distress, and gaining the ability to make decisions for themselves.

A big question at that stage was: *Would the positive trends identified during the period covered by the pilots persist once the payments stopped?* To a limited extent, the PFES explored this question. But that evaluation was made shortly after the pilot ended. To some extent at least, it seemed that the big question was left unanswered. In that regard, this was much like what has happened in pilots of numerous social policy experiments across the world.

Backed by generous support from the Azim Premji Philanthropic Initiative (APPI) and the Omidyar Network (ON), we have been able to conduct what we have called a *Legacy Survey* (LS) four years after the end of the pilot in the two tribal villages covered by that experiment. It is this on which we draw for the results reported in this paper.

Just as evaluations of this sort are extremely rare, so the methodology for conducting such evaluations is under-developed. But we believe that in this era of social policy experimentation such assessments should be conducted.

In the following, we present results from the *Legacy Survey*. The procedure was as follows. In January 2017, all households in the two tribal villages (Ghodakhurd- the treatment village - and Bhilami - the control village) were visited and all were asked a time-adjusted version of the FES as applied to them in January 2013. In 2012-13, the total number of households covered was 212 at the time of the Baseline Survey and 217 at the time of the FES. In the 2017 Legacy Survey, the total number of households had risen to 229, that is, 124 in the basic income village and 105 in the control village. In addition to the quantitative survey, we also conducted in-depth interviews and case-studies. Some of the case-studies were follow-up case-studies, i.e., they involved going back to the same families that were covered in 2012-13 using the same research tool.

In the Legacy Survey (LS) questionnaire, which is attached as Annexure I, there are two Parts. In Part 1 (Sections A to J), we applied the same questions as used in the FES. In Part 2 (Section K), more detailed Recall Questions were asked, in order to try to capture the perceptions of change and the impact, both short-term as well as longer-term, of the basic incomes. The Survey data were collected from January 25 to February 15, 2017. The qualitative case-study data were collected over a period of four months, from January until April, 2017.

The primary objectives were, first, to compare what had happened to the basic income recipients during the pilot and what had happened to them since then, and second, to see how they had fared by comparison with those living in the ‘control’ village, where nobody had received the basic incomes.

The results of the field data have been analysed mainly by using the difference-in-difference statistical method. This gives an idea of how much difference there is between the averages of the treatment group and the control group, by comparing the average change in the outcome variable for the treatment group, compared to the average change for the control group.

The difference-in-difference analysis was done in two ways. First, the difference-in-difference was measured between the FES data (2013) and the LS data. Here we expected that in some respect there would be a downward shift, in that the basic income village was no longer significantly better off than the control village. There were, however, interestingly, a few indicators that did not show such a trend, which meant that in those respects the basic income village had maintained the basic income effect as observed during the pilot.

Second, the change between the Baseline (2012) and the Legacy Survey was measured. If the difference-in-difference result showed significance at 99%, it was clear that there was still, four years later, a statistically significant difference between the Control group and the Basic Income group. From this we infer that the basic income had a *persistent effect*.

Before continuing, it should be noted that at the time of the pilot, the two villages had been selected because they were deemed structurally similar, with similar standards of living, having access to a pond and being more or less equidistant to roads and public medical facilities. So, we may presume with reasonable confidence that external changes of policy or economic development would have been similar for the two villages. The most significant changes were the government's toilet programme, which had resulted in many more latrines, and the extensive spread of the Food Security Act.⁸

What the following does is to recall the apparent impact of the basic incomes on various indicators during the 12 months of the pilot, and then see what has happened since it ended. We decided to analyse the dynamics through four types of effect, as follows.

- **Pick-up Effects.** These are the effects determined by the payment of the basic income, during the period in which they were paid. For instance, in some specified respect, if it was observed that the basic income had a positive (or negative) and statistically significant effect, then the pick-up effect occurred. In practical terms, this usually meant comparing the situation at the time of the baseline (BS) or interim (IES) with the end of the pilot (FES).

The pick-up effects were the effects found during the basic income pilot as observed in the Final Evaluation Survey in 2013.

Four years later the *Legacy Survey* tested for three types of effects.

- **Momentum Effects.** These refer to changes that were sustained or strengthened in the period after the end of the pilot. It seemed unlikely that there would be many of these. But maintaining the advantage gained during the pilot might be an outcome.

⁸In Madhya Pradesh, the State government has made the entitlement to subsidised food grains universal to the entire population of Scheduled Tribes and Scheduled Castes.

- **Persistence Effects.** These are advantageous effects that, partially, persisted after the end of the basic income pilot, in which a difference between the basic income village and the control village was maintained, even if it were reduced.
- **Drop-back Effects.** A more likely possibility is that the cessation of the basic incomes led to a return to what had been beforehand, such that by the time of the Legacy Survey there is no longer any difference between the control group and the families which received a basic income.

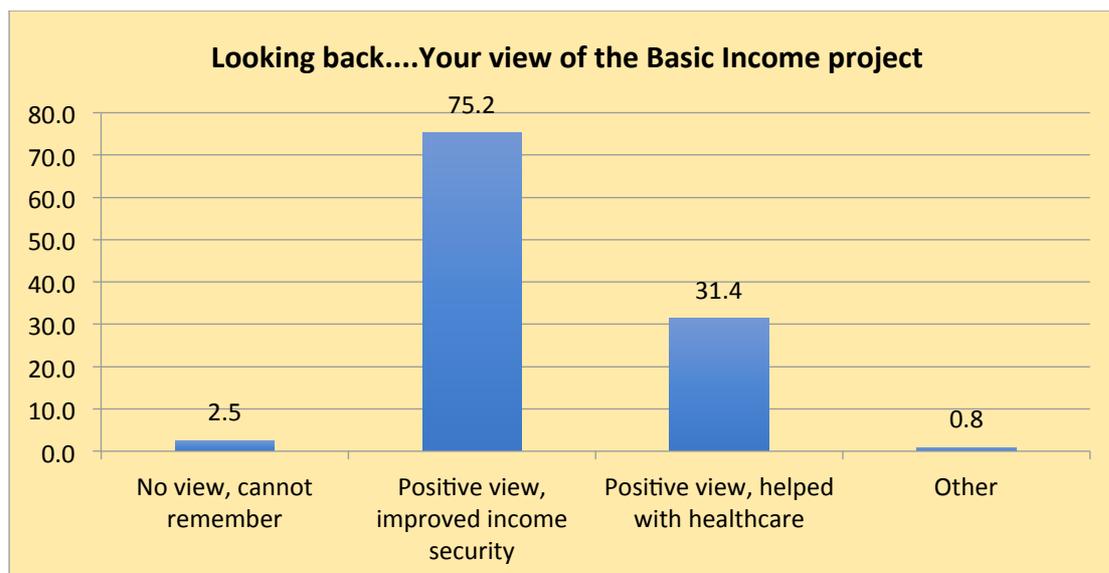
We will analyse the outcomes by reference to each of these effects, trying to identify statistically significant relationships.

In this study, we primarily look at the panel data to draw conclusions, but wherever appropriate we have used the perceptions of the respondents as well as the case studies to supplement and strengthen our understanding.

2. Recollections

Before considering these effects, it might be worth reflecting on what the villagers themselves recalled of the basic income. As part of the Legacy Survey we also asked people in Ghodakhurd to reflect on their experiences of the basic income pilot. The results might seem obvious, given that people were given money ‘for nothing’. But the fact is that the recollection of the basic income period was overwhelmingly positive. Bearing in mind that several people gave two of the provided responses, 75.4% said they had a positive view because it improved their economic security and 31.4% had a positive view because it had helped with healthcare. Nobody had a negative view.

Chart 1: Respondents’ Recalled View of the Basic Income project



Along with the objective questions on actual changes, the Legacy Survey tried to obtain a subjective view from the respondents on how they had viewed the one year of basic income and the four years since. Interestingly, the findings from these perceptions were not very different from the panel data. To a large extent, the respondents were aware of the difference the basic income had made to their lives as well as what effects persisted and what did not. When asked, “When the basic income payments stopped, did that make any difference to the household?”, 64.5% said it had made some and 30.6% said it had made a lot of difference.

Case study responses generally backed these generally positive recollections. For instance, 60 years old widow Genabai commented:

“In my lifetime, I have seen two major things happen to this village. Before this we were in a very poor condition, collecting wood and selling in the nearby markets. The first thing that happened was the construction of the bund in 2009 which gave us this pond. People began cultivating their lands. Then came this money that was given to us for one year in 2012. There is an old story about this village that a celestial wedding party on their way to the venue stopped over briefly in this village. On the outskirts of this village, there are impressions of horses’ hooves on the rocks. That’s the origin of the name of this village “Ghoda-khurd”- Ghoda means

horse, and Khurd means hooves. So, the entire village felt that the money came to the village because the gods have blessed us. It has done a lot of good to the village.”

The head of the village school, Rajendra Luniya, who has been working in the village since 2003 recalled: *‘When I first came here, I saw so much poverty in this village. No teacher was willing to work here. Further, they were seen as dangerous people because they all had weapons. They seemed wild and primitive. About less than 10 years ago, they began cultivating. Then came this experiment that you all did in 2012. The experiment gave a major push to the economy of the village in many ways. In front of my eyes, I could see things changing. Equally, I have also noticed a major positive behavioural change in these people because of that experiment.’*

3. Changes in the Area in the Intervening period

In the intervening years between 2013 and 2017, there were several changes that affected both the basic income and comparison villages. Although there did not seem to have been changes in the economy, and few changes in cropping patterns or in surrounding industry, there had been major changes in Government’s welfare intervention and facilities.

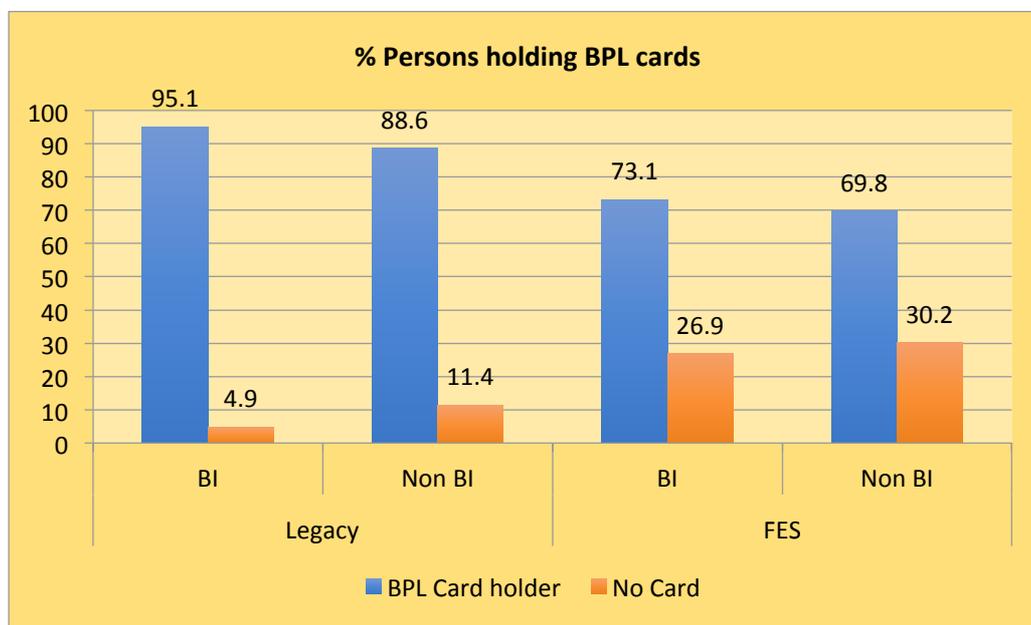
In 2013, the Federal Parliament approved the National Food Security Act, and in 2015 the State Government of Madhya Pradesh approved rules whereby all tribal people became entitled to subsidised food grains and kerosene under the Food Security Act. This meant that the whole population of both Ghodakhurd and Bhilami were covered by the Act.

In 2013, 73% of families in Ghodakhurd and 69% in Bhilami said they had BPL cards, but at the time of the Legacy Survey that had gone up to 95% in Ghodakhurd and 89% in Bhilami, a highly significant increase.

Another major change in both villages was in infrastructure. When the basic income project was started in 2012, the road to the villages was kucha and difficult to navigate. In the monsoon it became almost impossible to do so. However, in the succeeding four years

pucca roads had been built leading to both villages. Presumably, this will have an impact on the economy in the next few years.

Chart 2: BPL card-holding households



Another highly significant infrastructural change had taken place within the villages leading to an improvement in living conditions. In the 2013 survey, it was found that except for one household in Bhilami, all villagers would defecate in the open, in the forests surrounding the village. In the intervening period the Government of Madhya Pradesh launched a campaign to get rid of open defecation and even has a portal called the *Swachh MP Portal*. The result of this campaign was that open defecation had decreased from 100% to 26% in Ghodakhurd and to 33% in Bhilami.

4. Welfare: Living Conditions

In the evaluation surveys conducted during the pilot, changes in living conditions were assessed, and the Legacy Survey traced what happened subsequently in several respects. The major change in living conditions, as just explained, was in the construction of individual toilets, associated with a big reduction in open defecation. There was also a change in *electricity connectivity*. According to the FES, there was a strong pick-up effect during the pilot, in that households in which members had received the basic income were more likely

to have improved electricity connections than those who had either not improved in the last year or had no change (14% vs. 1%).

The same question on electricity improvement was asked in the Legacy Survey, and although there had been an improvement in the preceding year in the comparison village, the former basic income families had made further improvements too, so that the difference remained. Some 24% of those in the basic income village had extended electricity in the last year, compared with 13% in the control village. Thus, in terms of electricity connectivity there was a *persistence effect*.

In terms of *drinking water*, during the course of the pilot 66% of basic income recipient households came to obtain a private source, reflecting a big pick-up effect, in that only 38% of households in the control village had private water supply. The differential persisted, in that in 2017 more of the former basic income households had private sources. But the differential had been reduced. Whereas 65% of the BI households now had a private source, 55% of the non-BI households had acquired one.

In other words, in the intervening years, the control village too acquired private drinking water sources, while few families in the basic income village did. Nevertheless there is still a statistically significant difference (DID=2.40) with fewer control families having private sources. So we may say there had been a persistence effect in this respect too.

Respondents were also asked if they had made any *housing improvement*, such as roof repairs, or the construction of new walls or rooms. During the pilot, there was a strong pick-up effect. Nearly 41% of basic income recipient households made an improvement of some sort, compared with only 24% of those not receiving the basic income. One of the most visually dramatic effects of the basic incomes had been that over 11% of the recipient households constructed a new dwelling during the course of the pilot, compared with only 1% of the control village households. In the subsequent period, when no basic incomes were being paid, there was no difference in the rate of improvement between the villages, showing a *persistence effect*.

5. Welfare: Nutrition and Health

Among the more remarkable outcomes of the basic income pilot was that nutrition and health showed improvements.⁹ There were various indicators of what were, in effect, strong pick-up effects. It seems the improved nutrition drove the health outcomes. In the Legacy Survey, while recollecting how they had spent the basic income, 55% of the respondents said that they had spent it mainly on food, and most of them said that this made a difference to their eating habits and household diet.

Four years later, when there is no basic income and they had to rely on their own earned income for food, one might have expected a fall-back in nutrition. However, the results were encouraging. Over 70% of the former basic income families said they continued to have a better diet than they had before the basic income, although perhaps not as good as the year when they were actually receiving it.

As one agricultural labourer from Ghodakhurd village said in 2013:

‘Earlier we bought ration for the whole month because going to the market again and again was too expensive. And if the provisions ran out by the middle of the month, then we used to buy a little bit from the village shop, and if there were no oil and spices, we made do with salt and chilli. But we did not face that problem this year because of the basic income.’

The first question on nutrition in the evaluation surveys during the pilot was whether or not the household usually had enough income to cover its food needs. By the time of the FES, most households said their income was sufficient. This was shown even more in the tribal village than in the general villages covered by the larger pilot.

During the basic income pilot, as was expected, tribal families spent more on food. Responding to questions on “sufficiency of income for food”, the Ghodakhurd families had reported that, *whereas earlier only 52% of families had a sufficient income for food, on*

⁹ This is shown in detail in chapter 3 of Davala et al, 2015.

receiving the basic income this went up to 84%. By 2017, this percentage had dropped to

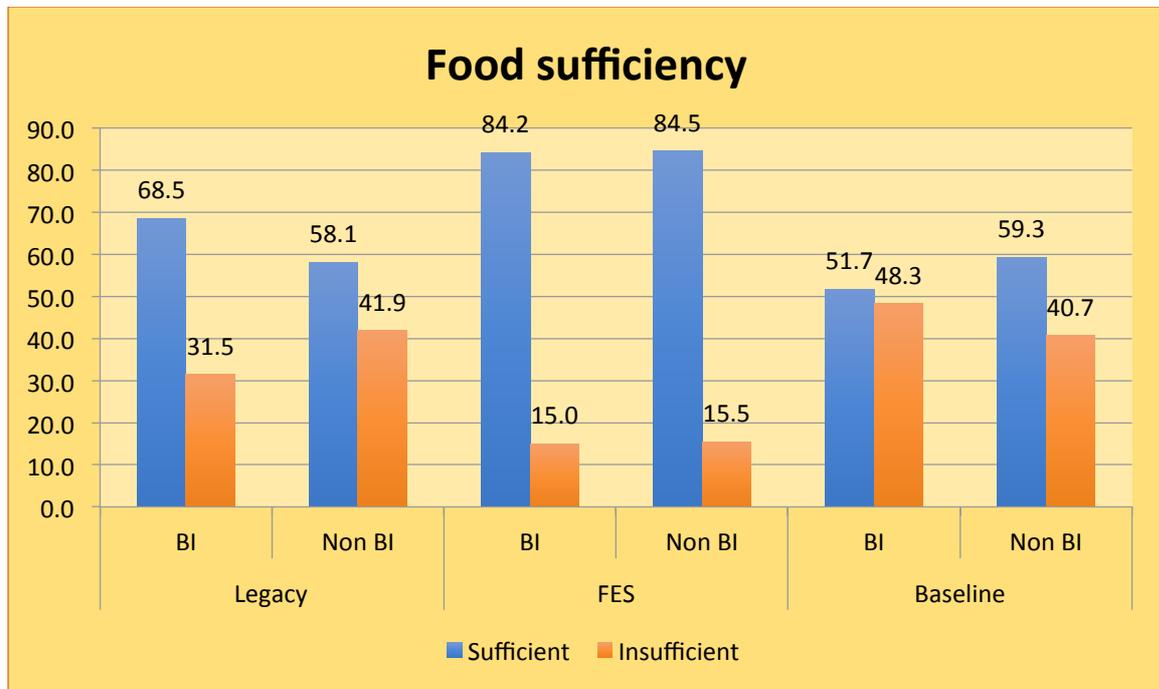
2012 (at the beginning of the pilot)	January 2013 – End of the experiment	January 2017
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purchase and consumption of food items. What is clear is that the food purchase and consumption practices that were triggered off during the experiment somehow continued and seemed to have stayed.

68.5%, which was statistically significant (DID=2.12) (Chart 3).

Nevertheless, in 2017, the proportion of families in Ghodakhurd who said that their income was sufficient for their food needs was still significantly higher than those in the control village. It seems there had been a significant persistence effect. The difference seemed to have been due to the increase in earned income as a momentum effect of the basic income.

Chart 3: Food Sufficiency Before, During and After Basic Income



<ol style="list-style-type: none"> 1. We eat thrice a day. We had aaluki sabji (potato curry) and gehunki roti (wheat bread) in the morning. 2. We cook the same food for everyone and it is sufficient in quantity. Man eats 3-4 rotis and woman eats 2 rotis at a time. 3. Nobody drinks milk. 4. We eat meat once a month; and vegetables twice a month only if we have money. We mostly roti with potato curry. Children also eat rotis. 5. We have enough food, except for a few days in a month. 	<p>We spent the <i>Cash Transfer</i> money on food and other household requirements like chilly, salt, oil, and wheat In comparison to last year, now we buy more food items, regularly, and we eat better food. We don't have to suffer like before.</p>	<ol style="list-style-type: none"> 1. Thrice a day. Roti made of wheat flour and potato curry was our last meal. 2. Same food for all. 3. We don't drink milk. We use it only for making tea. 4. All eat meat and eggs. In a month, we eat meat once, and eggs twice a month. The female members of the family also eat meat and eggs. If we have guests we cook meat once or twice again. 5. We cook vegetables definitely at least about 10 times in a month. 6. We buy fruit at least twice a month, and also when the fruit vendor comes to the village and children ask.
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Table 2--: Food Intake in 2012 and 2017¹⁰

One important finding from the pilot concerned the use of alcohol and other so-called private “bads”. It is widely believed (or asserted) that if poor people are given money they will “drink it away”. The experiment in Madhya Pradesh showed that this was not so.¹¹ In fact in the tribal village, the average amount spent on alcohol actually *decreased* during the period in which the basic incomes were being paid. Local people attributed that to extra work. Earlier there was not enough work and so men sat around drinking to fill in their time;

¹⁰Source: From Manjubai and Hariram’s interview on Food intake

¹¹ This is a finding from many cash transfer schemes across the world. D.K. Evans and A. Popova (2014), *Cash Transfers and Temptation Goods: A Review of the Global Evidence*. World Bank Policy Research Working Paper WPS6886, Washington, DC: World Bank.

when they received a basic income they used the money partly for more production and thus became busier, so they had less time to waste.

The Legacy Survey examined what happened four years later. Did the men go back to drinking at the same level as they used to? The results are surprising and show a *momentum effect*. During the year 2012 of basic income 54% said their drinking has decreased and one-third said it remained the same, with a small percentage saying it had increased. After four years, 54% said that it was still lower, and nearly one-fifth said they had stopped drinking altogether.¹²

Chart 4: While on Basic Income, household expenditure on alcohol

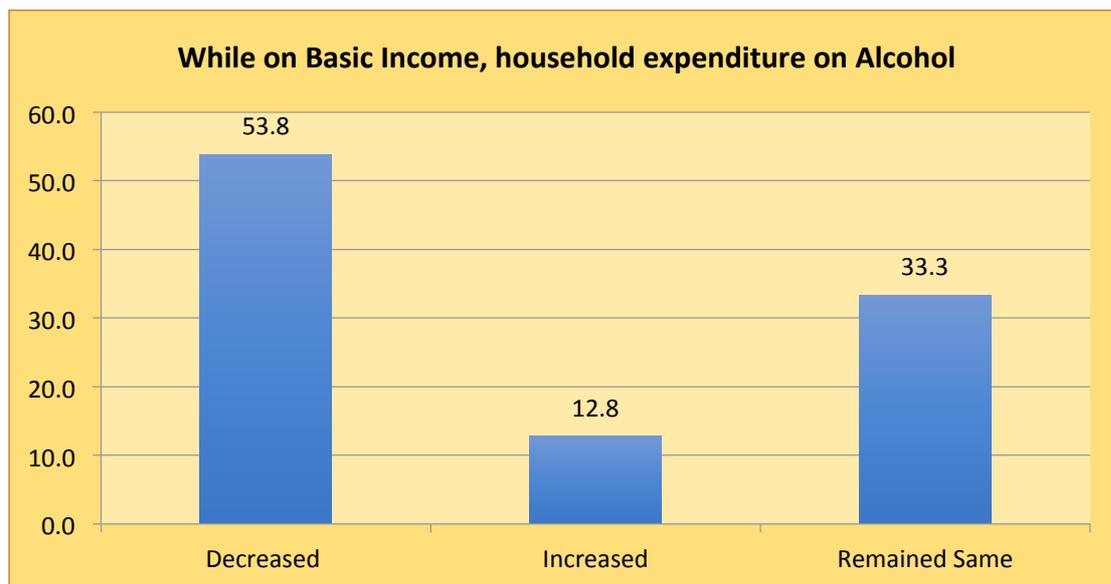
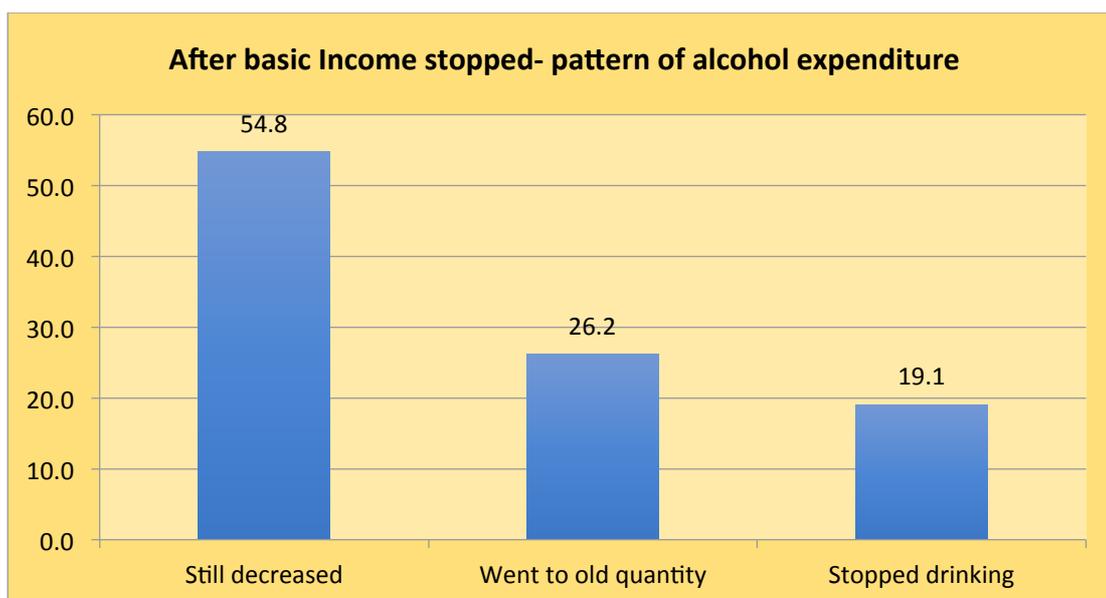


Chart 5: After Basic Income stopped-pattern of Alcohol expenditure

¹² When such potentially favourable behavioural change occurs, it would be valuable if more detailed sociological and medical analysis were to be undertaken.



One important *pick up effect* concerned use of health care facilities, which had a consequent improvement in health of the families. While recollecting how they had spent their basic income, about 15% said they spent it mainly on health care, mainly those who experienced major illnesses in that year.

The private system of primary health care consists of private doctors, most commonly local medical practitioners (LMPs), colloquially called “Bengali Doctors” as many of them are non-locals from West Bengal. They have been living and working in the villages for many years and have been providing a service that seems to be appreciated by villagers. The Bengali doctor is often the first person to whom a sick person goes, since he is the one easily accessible and always available. Most of them also provide their service on credit. Villagers maintain an account with a doctor, and pay him when they have money.

During the basic income year, most families had experienced minor illnesses, and 80% of them said that the basic income changed their health care practices. Nearly 50% had shifted to private health care, and many bought medicines more regularly or used them more. In other words, because they had cash, they **accessed the services** of the private (Bengali) doctors, and also in the case of illnesses, took **medicines more regularly**.¹³

¹³ These findings are elaborated in Davala et al, 2015, op.cit.

Box No. 1: The Public Health System

The Public Health System

In any village, access and use of healthcare are affected by distance to health outposts. From Ghodakhurd, the tribal BI village, the nearest medical sub-centre was in Jam Bujurg, which had a dispensary run by the local elected body called Gram Panchayat. But by the time of the pilot, the centre had been closed. This in itself would have affected the residents of the former BI village adversely, so tending to weaken any observed persistence effect on health and healthcare.

Therefore, for their healthcare, the residents of Ghodakhurd mostly went to another sub-centre in Bargonda, 8 kms from the village. The available private clinics included one in Choral dam (5 kms away), one in Bassi Pipri (7 kms away) or one of two in Maind (12 kms away). The nearest Government Hospital was in the town of Mhow, 23 kms away.

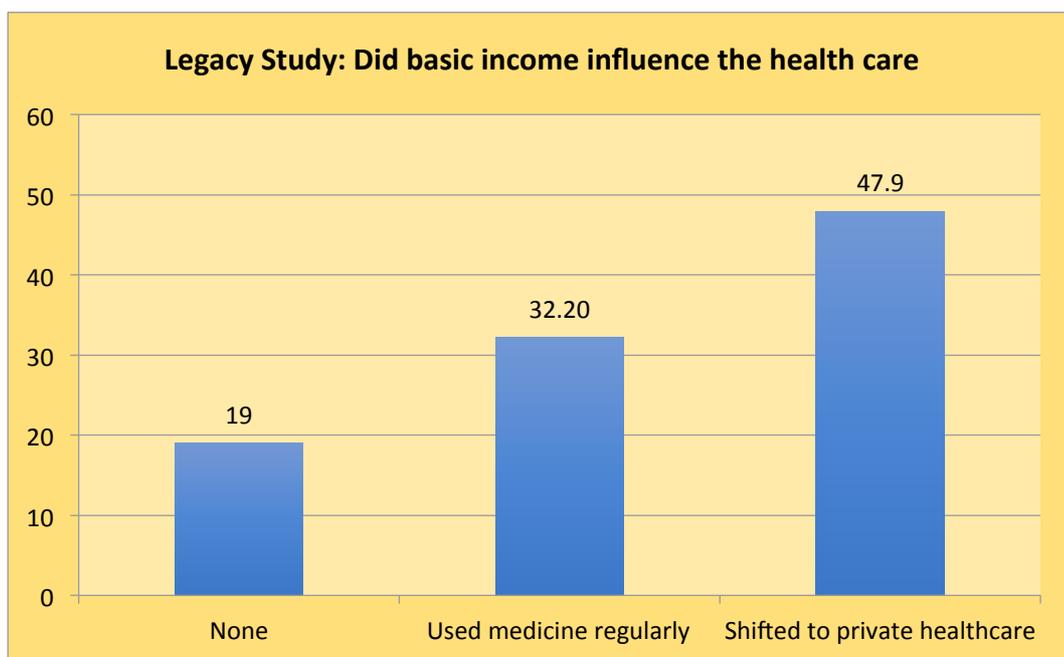
For people in the control tribal village (Bhilami), distance, though considerable, was not so much of an issue. Three local doctors served the village, with their own private clinics. Residents also spoke of going to the nearest government Community Health Centre in Manpur (8 kms away). The CHC is the biggest institution of the three-tier primary health care system run by the government. The health sub-centres in both villages were mostly used for disease prevention services, notably child immunization. For other illnesses, residents in both villages relied on local private practitioners or the nearest government or private hospital.

Typical of responses, in 2013, one villager, Hariram, said: *“For seasonal and sudden illnesses we go to a private doctor at Bassi (8 kms from the village), who charges a fee of 300 rupees. There isn’t any government clinic or hospital in our village or nearby. One has to go far away to Mhow to the government hospital; so we don’t go there. On a regular basis, we go to a private doctor only.”*

In the FES, all recipients were asked, “Did the basic income make any difference to the type of healthcare you used?” The evidence showed a strong variety of effects. These were replicated by recalls in the Legacy Survey.

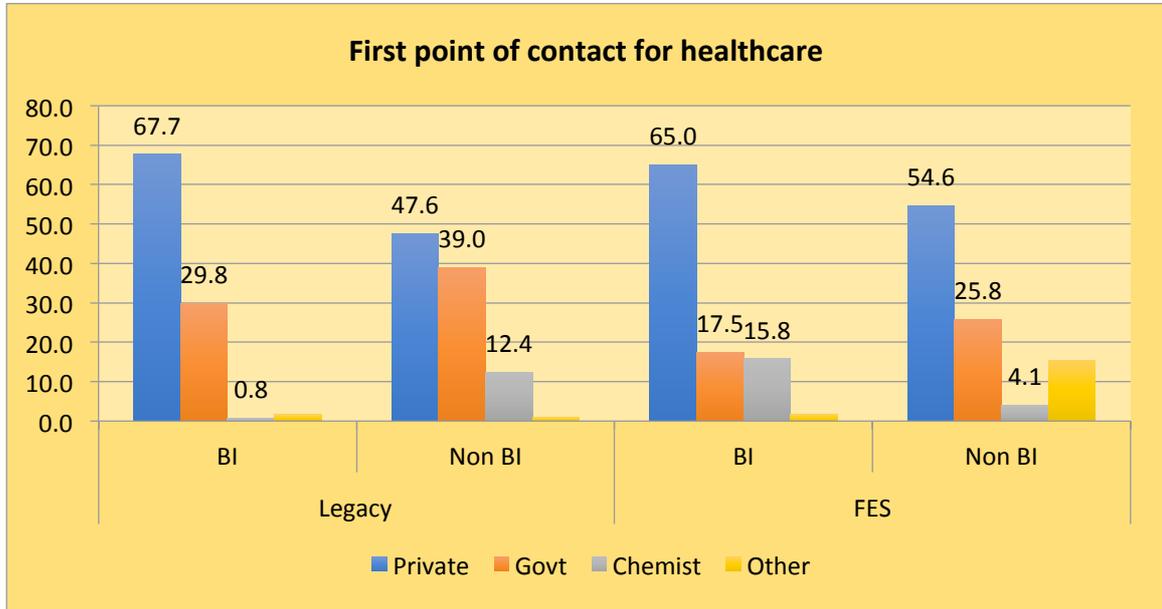
The Legacy survey showed a *persistence effect* in the use of health care. Nearly one-third of people said that they continued with the same level of health care access as they had at the end of the basic income year, and one-third said they went back to the old practices. The rest said that they continued with the new practice but could not completely manage.

Chart 6: Legacy Study: In what way did basic Income influence your health care



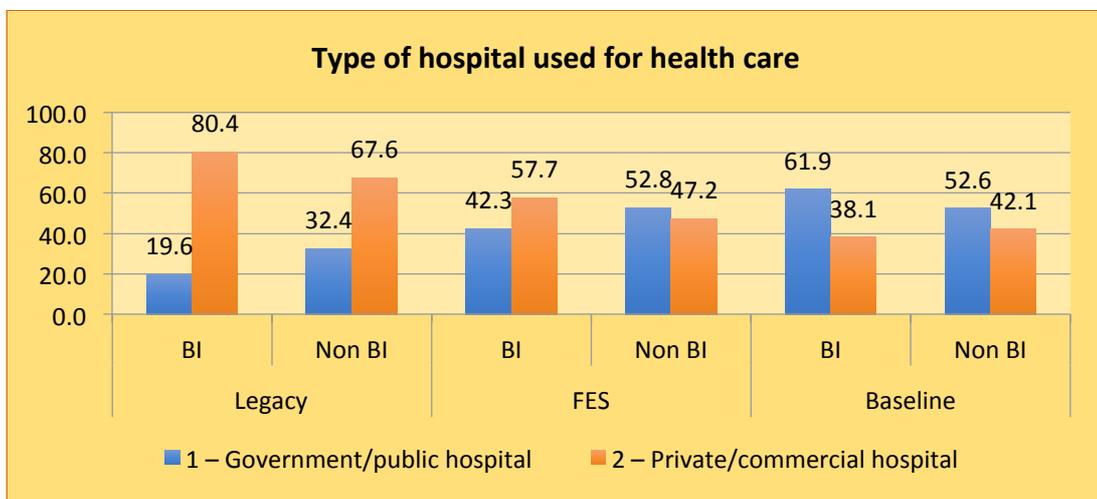
This effect can be seen in table below. As a response to the question as to what was the first point of contact in an illness, 65% of the BI families said that they used private health care after the BI (up from around 50% at the time of Baseline survey). This continued at the same level even at the time of legacy survey. However, this was not the same in the Control village. The percentage going to private health centres declined from 54% to 47% in the same period. This difference among the BI and non-BI village was found to be statistically significant (DID=2.20).

Chart 7: First point of contact for health care



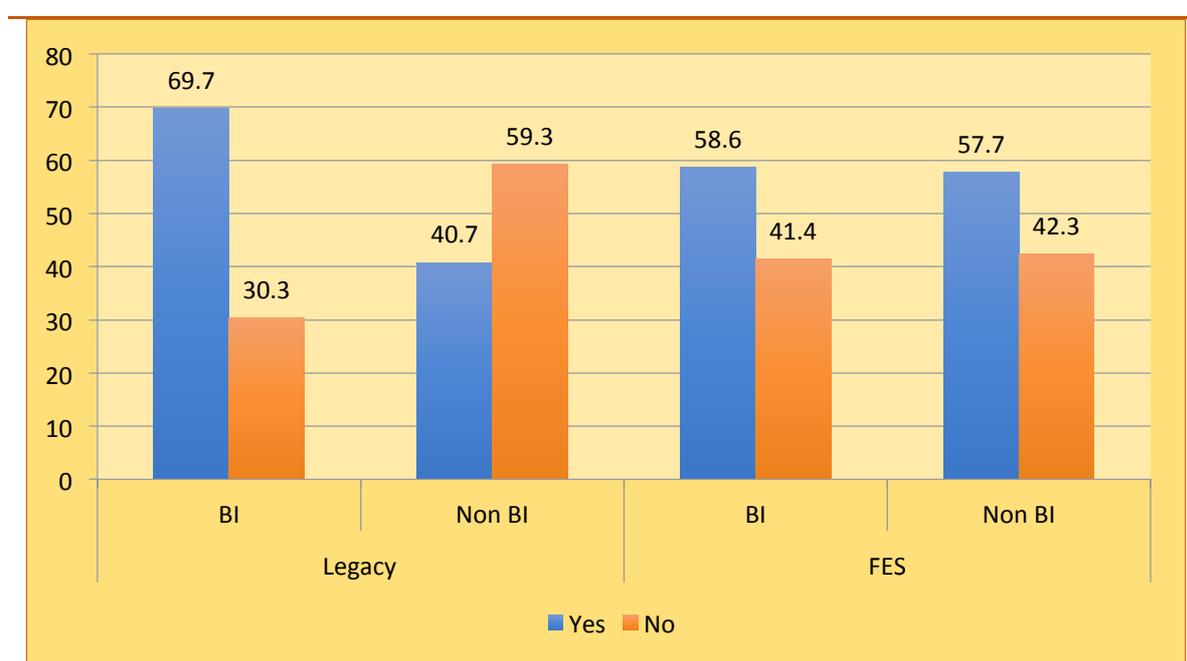
For a majority, private medical care was preferred to government health care in the BI village for the first, second and final lines of treatment. For hospitalization too, private hospital was the preferred choice and more so in the basic income village than in the comparison village and increased from 2013 to 2017, clearly indicating a *momentum effect*(DID-1.58).

Chart 8: Type of hospital used for health care



Another indicator that showed an improvement in health care practices was the speed at which a person was cured. As can be seen in the tables below, in Ghodakhurd, 70% people were cured on first treatment, whereas in Bhilami only 41% were cured in the first treatment. The likelihood of the illness lingering on was higher in Bhilami(DID=3.93). This was true whether it was a minor illness where cure was achieved at the first point of contact, or a major one where the patient was referred to another health practitioner or to a hospital.

Chart 9: Percent households cured in first treatment



Although there seem to be improvements in health access, these have been obtained without any significant increase in costs per patient, as can be seen from the table below.

Table 3: Amount paid for treatment of illness, including transport, medicine and tests

What was total paid for treatment of the illness, including transport, medicine, tests, etc.?		
	Treatment	Control
Total amount (Rs)	94780	77300
Amount per patient (Rs)	1436.1	1431.5

In most villages, people do not buy medical insurance. However, during the basic income period there was small increase in medical insurance in Ghodakhurd, with about 8% of

families investing in an insurance scheme. Once the basic income was over, there was *drop back effect* and only 2% of both treatment and control villages bought insurance.

Interestingly, the majority move to what is perceived to be better health care seems to have been a sustained behavioural change, perhaps due to acquired awareness and experience of alternative choices, initiated during the year of the basic income. This behavioural change led to improvements in health access, and a faster rate of recovery from illness.

6. Welfare Effects: Schooling

Education of their children is one of the ways by which poor families attempt to improve their future. They make the best choice they can, given their limited resources. During the basic income year, 10% of families said that they spent the cash received mainly on schooling, while many others spent some of the basic income on schooling.

In the past decade and a half, a mixed public-private schooling system has emerged in rural MP, with a few religious schools as well. Government schools are mostly used at the primary level by low-income families, and coexist with a growing number of fee-paying and competing private schools, the latter being used not just by affluent families but a growing number of lower and middle-income families as well.

Following the enactment and enforcement of **The Right of Children to Free and Compulsory Education Act** since 2010 in the country, government primary and middle schools have been established in many villages, but higher secondary schools are still located farther away. For instance, the local Government school was up to Class 8 in the tribal villages of Ghodakhurd and Bhilami. For further education, students have to travel to other nearby villages, such as Badijam (3 kms away) or Choral Dam (5kms away). In all villages, the school is run in a pucca building, and also has a kitchen to cook mid-day meals for children.

In Ghodakhurd, the basic income village, the school had one senior permanent teacher, a junior permanent teacher, and five guest teachers, mostly sourced from within the village.

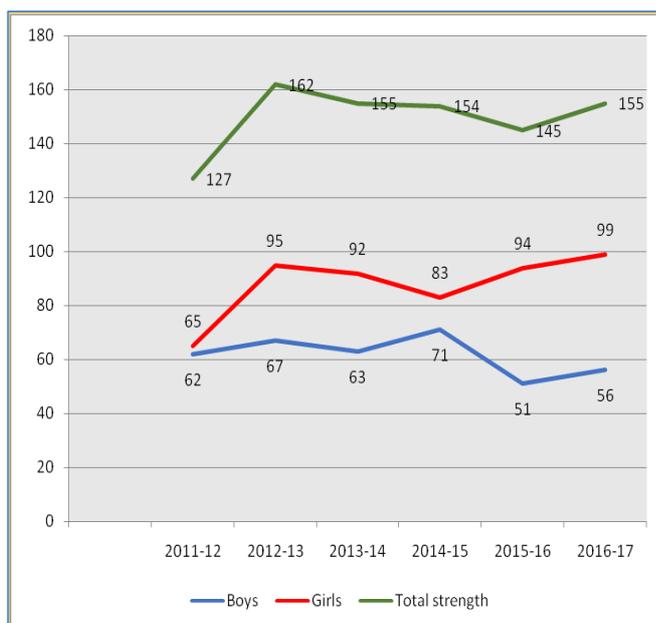
For all practical purposes, the school was run by guest teachers, who were appointed on contract basis. Because of the shortage of teachers, and also because they did not have sufficient strength in each class, different classes were often combined and taught by the available teachers. The nearest private school was in Choral Dam, 5 kilometres away from Ghodakhurd.

School records showed a dramatic increase in enrolment during the BI experiment. The following Table shows the overall school enrolment, and also that of boys and girls for the academic years between 2011-12 to 2016-17. The increase has been mainly that of the enrolment of girls. The sharp increase happened in the year that the basic income experiment was on, i.e., 2012. The pilot started in February 2012, and the academic year began in June 2012.

Table 4 Enrollment in Ghodakhurd Government School¹⁴			
Academic year	Total Strength	Boys	Girls
2011-12	127	62	65
2012-13	162	67	95
2013-14	155	63	92
2014-15	154	71	83
2015-16	145	51	94
2016-17	155	56	99

Chart 10: School Enrolment in Basic Income Village

¹⁴From Ghodakhurd School Records



The introduction of the basic income had a substantial *pick-up effect* in 2013. Many families began to spend more on schooling, as mentioned above, the most striking change was higher expenditure on schooling for girls. The BI recipients in Ghodakhurd spent more on educating their girls than before the BI payments started, and the total mean expenditure on educating girls increased by nearly 88%. This was mostly due to increased spending on school fees, attributable to new enrolments, i.e. girls not in school who were enrolled during the pilot. Expenditure on other school items for girls also increased, suggesting that basic income had a salutary impact on the schooling of tribal girls.

Since the BI payments started just before the school year began, many families took their children out of the local Government School and sent them to the School in Choral Dam, six kilometres away, with percent of children going to private school increasing from 20% to 30%. According to a survey carried out in the Choral Dam School, 70 children from Ghodakhurd joined the school in academic year 2012-13.¹⁵

As one parent said in one of the case studies in 2013:

¹⁵When we cross-checked with the government school concerning this drop in school strength, we were informed by the school authorities that even if the children leave the government and take admission in a private school the parents do not ask for a transfer certificate, so that their entitlements are not discontinued. Similarly, the school does not want to show a drop in strength since that would allow the government to cut their budget.

“All the four children of my Jeth (elder brother-in-law) go to school. The elder son Yashwant stays in a government hostel near Mhow while he is studying. Everything including food and lodging is free of cost there. And the education is good. Yashwant is in 6th grade. The other three children go to private school at Choral-Dam. We only put them in private school this year, thanks to the basic income money.”

Unfortunately, most of the families could not afford to continue this private education, and according to the school in Choral Dam, 60 children left within two years and came back to the Government school so that in schooling, there was definite *drop-back effect* which was statistically significant (DID=6.28). There was a drop from 81% to 71% in government schooling between the Baseline to FES, but again an increase to 85% in the Legacy Survey for the BI village. However, the change was minimal for the control village. The difference was found to be significant as shown by the DID.

Table 5: Government School vs Private School

	Legacy		FES		Baseline	
	Basic Inco	Control	Basic Inco	Control	Basic Inco	Control
Government	85.54	83.74	70.89	88.51	81.0	85.7
Private	14.46	16.26	29.11	11.49	19.0	14.3

Although there was a drop-back effect in the type of school as well as expenditure on schooling, there seemed to be a *behavioural* change in the importance that was given to schooling by parents and children. One indication of this is how children’s labour is used in the household.

Child labour is an emotive issue, and by all accounts remains pervasive across India. In 2012, around the time of the pilots, the Indian Government announced that it intended to introduce a ban on employment of children under the age of 14, thereby tightening the restrictions under the 1986 Child Labour Act. Unfortunately, as long as impoverishment continues, children will be used economically by their families, if they can. The questions

most pertinent in the pilot were whether or not the basic incomes would lead to a reduction in child labour, and if so, of what types of work and labour?

In most rural areas, even when children are attending school, they are expected to help the family in work if there is work to be done. Most girls do some form of housework or child care. Both boys and girls participate in grazing animals and also work on family farms during harvest time. Those families living mainly by wage labour often take their children with them to help earn a little more. Children working in the fields along with their parents is common throughout this region. This work rises to a peak during the harvest season. Schools in the region often adjust their daily timings and their vacations to suit the rhythm of farming communities.

In the FES questionnaire, a set of questions was asked on whether children's labour or work was disruptive of schooling and studying? The pattern of child work did change considerably after the basic incomes began in Ghodakhurd, partly reflecting the fact that many BI households moved from wage labour to farming, and as they did so, their children worked more on the family farm rather than go out for wage labour.

So, whereas 48% of Bhilami (control village) children did some labour on others' fields, only 5% of Ghodakhurd children did so, whereas over 71% of Ghodakhurd's children worked on their family farm. This shift created a paradox. Children in Ghodakhurd were *more likely* to work than those in Bhilami. But their work was *less likely* to affect their schooling. So, 36% of children in Ghodakhurd worked as opposed to 26% in Bhilami, but only 16% said their schooling was adversely affected, as opposed to 37% in the control village (see Table below).

Table 6

Perceived impact of child labour on schooling, by village type

Village type	Basic Income (Percentage)	Control (In Percentage)
Extent of child work, of which:	36	26
Wage labour	5	48
Family farm	71	41
Non-farm family	24	11
Does the Child's work interfere with her/his stud	16	37

In the Legacy Survey, one-third of the households in both villages, children helped in household business or farm or worked for income. However, there was a drop back effect, in that many children in the BI village, now worked not only on the family farm but also for the market in labour. Furthermore, in both villages, the child's work was important to the family income. As can be seen from the two tables below, there had been a definite *drop back effect* in this respect.

Table 7: Tribal Villages: work of child labour

	Legacy		FES		Baseline	
	Treatment	Control	Treatment	Control	Treatment	Control
Family farm work	69.1	61.5	71.3	41.9	31.4	28.6
Work for market	25.9	35.9	13.2	48.4	42.8	39.3
Other	4.9	2.6	15.5	9.7	25.8	32.1

However, there seems to have been a behavioural change due to the basic income. Even though there is little difference in the type of work that the children do, their effect on schooling was different in both villages. Parents and children in the basic income villages, are less likely to let the child work affect schooling. Some 42% households said that it affected schooling adversely in the BI village at baseline and 46% continued to say the same in 2017, at the time of Legacy study. This is an important *persistence effect* ($DID=-2.80$).

Table 8: Work affected the child's schooling

	Legacy		FES		Baseline	
	Treatment	Control	Treatment	Control	Treatment	Control
No, not attending school	12.35	20.51	8.53	6.45	14.3	6.1
No, does not affect schooling	41.98	23.08	37.21	16.13	35.4	46.2
Yes, affects schooling adverse	45.68	48.72	34.88	66.13	42.2	42.6
Don't know/unsure	0.00	7.69	19.38	11.29	8.2	5.1
Total	100.00	100.00	100.00	100.00	100	100

7. Economic Impact

In both tribal villages, the main economic activity was either wage labour or farming. Within each village, there was not much of paid labour available. Much of the own-account farming was conducted on small holdings of just a few bighas. The crops grown were mainly wheat in the Rabi season, and soybean and corn during Kharif. Many people in both villages went for paid labour to brick kilns in the town of Mhow and to potato processing farms in other nearby villages.

All these forms of employment and the payment from it are both uncertain for most villagers. Households often cannot predict how much they will be required to do and often worry about receiving payment and about when they will do so. Clearly, by all accounts, they rarely receive their wage just after they have performed the labour. This lends significance to the receipt of a regular cash payment, since income from labour is 'lumpy' and irregular, traditionally resulting in one of the great problems faced by rural families, namely lack of liquidity, which is a fertile ground for the households to easily fall into a debt trap.

A *pick-up effect* of the basic income was a shift of occupation from wage labour to own-account farming in Ghodakhurd. Most tribal families owned some land (over 80%), and most of the land they occupied was their own, although some was encroached, some rented. Many of the plots were small and underproductive, mainly because of lack of investment in irrigation, good seeds and fertilizers, with the result that many tribal families earned a substantial proportion of their income from wage labour, rather than as farmers working on

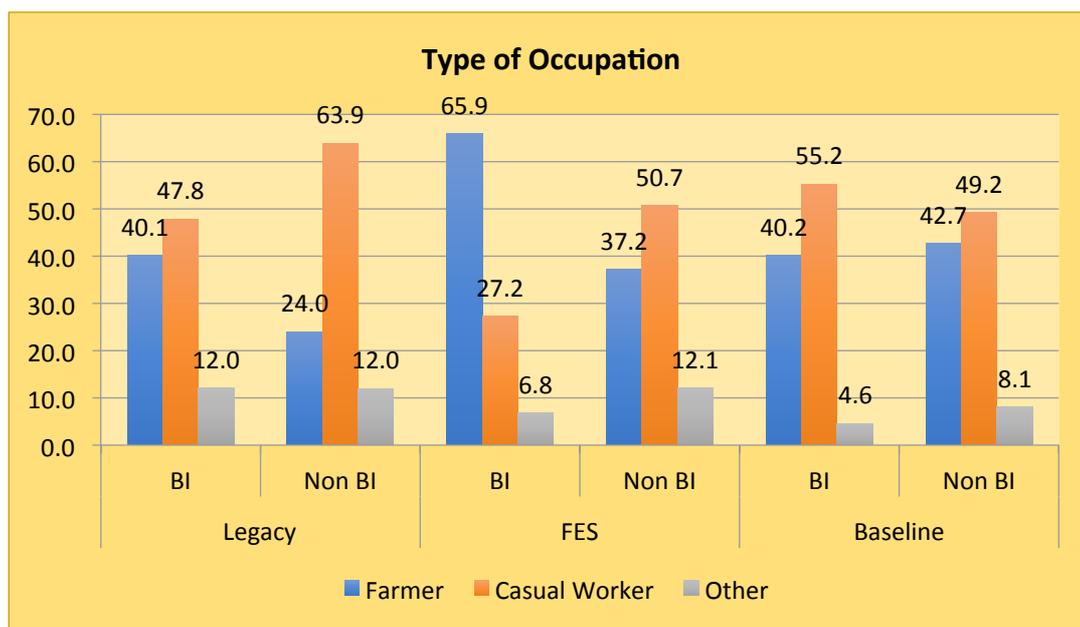
their land. Because of their dependence on money-lenders for agricultural inputs, own-account farming was a doubly risky enterprise.

The basic incomes seemed to have enabled more families to farm the land they occupied more intensively, thereby converting them from being primarily labourers to primarily farmers.

The villagers were asked to specify their main occupation in order to see if the basic incomes had any effect on the type of work they did. As almost all households owned agricultural land, and as most households reared animals, the shifts shown in the figure below are significant. While there was little or no change in the control village, there was a significant shift into farming in the BI village.

In the control village, in the baseline survey 42% of the households reported that their main occupation was farming, and 50% said wage labour was their main activity. Across the three evaluation surveys during the pilot, the share of farmer households remained more or less the same, as did the proportion of wage labourers. But in the BI village, a shift from wage labour as primary occupation to farming took place. In the baseline, 40% said their main occupation was farming, while 55% said wage work. After 12 months, 62% said their primary occupation was farming and only 27% said their primary economic activity was wage labour.

Chart 11: Tribal Basic income village: reported main economic activity



Given the opportunity, tribal villagers would prefer to cultivate their land as opposed to labour as wage workers or bonded labourers, which many have done in either brick-kilns or on the farms of landlords. There was also a small trend in terms towards animal husbandry as main occupation.

The shift from labour to farming seems to have occurred mainly because of increased expenditure on seeds, fertilizer. Traditionally in both Ghodakhurd and Bhilami seeds and fertilizers had to be bought on credit due to a lack of liquidity. The rates at which credit was given were very high and so made farming uneconomical. For example, we were told by the villagers that if they borrowed one sack of soybean seeds at the end of the season they would have to return 2 sacks, amounting to an interest rate of 100% in three months!

Four years later much, but not all of this gain was eroded. As can be seen in the graph below, in 2017 there is still a substantial difference between the basic income and control group. In Ghodakhurd 40% of people said they were farmers as compared to only 24% in Bhilami. This difference is significant between baseline and legacy but not between the FES and legacy, implying a *persistence effect*.

This *persistence effect* is also reflected in the income pattern where incomes from working on own account first increased from 15% to 65% and then fell to 37.5% in the Treatment village. The pattern was somewhat similar for the control village but to a much lesser extent. This difference was found to be statistically significant

Table 9 : Trends in working on own-account for income

	Legacy		FES		Baseline	
	Treatment	Control	Treatment	Control	Treatment	Control
Working On own-account, fo	37.5	26.4	64.9	37.7	15.0	16.0

Yet another *pick-up effect* during the pilot was that more people, especially women, engaged more in secondary work. This effect was sustained four years later with the average income from secondary work being 25% higher at Rs 1089 in the BI village as compared to Rs 875 in the control village.

One of the most remarkable *pick-up effects* during the basic income in 2012 was the buying of livestock of all types. The biggest change was due to families putting some of their basic income money together to buy small or large livestock. Indeed, the outcome was nothing less than dramatic.

In the village where the basic incomes were paid, there were 424 small livestock (chicken and goats) at the time of the baseline. By the end of the pilot, there were 633. By contrast, in the control village there were 466 at the outset, and 355 at the end. In the case of large livestock (buffaloes, cows or oxen), the number rose from 259 to 323 in the basic income village and fell from 207 to 190 in the control village. These shifts coincided with the reported increase in animal husbandry as a main or second main economic activity.

That is, while the number of cows and buffaloes declined in the control village by 23%, due to sales or deaths, the number increased in the basic income village by the same percentage,

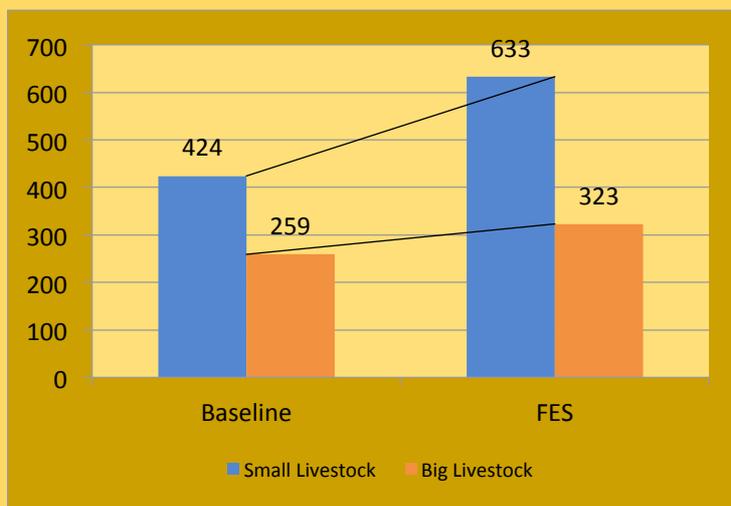
seemingly almost entirely due to households buying more livestock, which then started to breed.

In the basic income village, the share of families owning large livestock increased from two-thirds to 81%, whereas in the control village the share fell from two-thirds to 51.5%. In the case of small livestock, the share rose from 62% to 78% in the basic income village, while rising only slightly from 59% to 61% in the control village.

Table 10a: Change in Number of Small and Big Livestock– BI Village

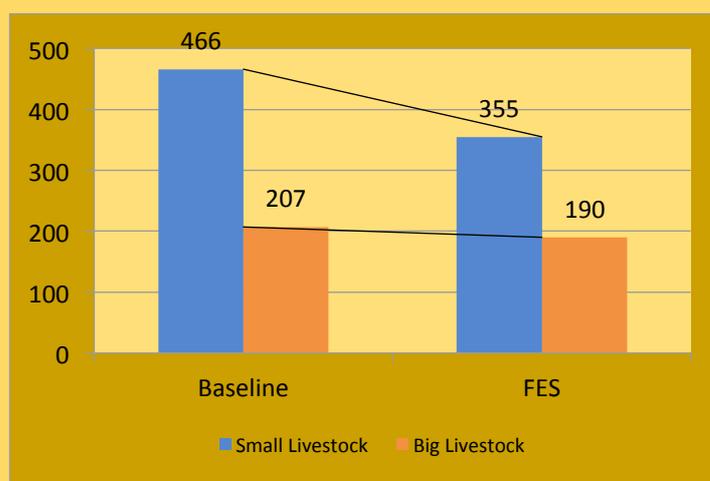
Type	Baseline	FES
Small Livestock	424	633
Big Livestock	259	323

Chart 12 : Change in number of Livestock in BI Village



Type	Baseline	FES
Small Livestock	466	355
Big Livestock	207	190

Chart 13: Change in number of Livestock in Control Village



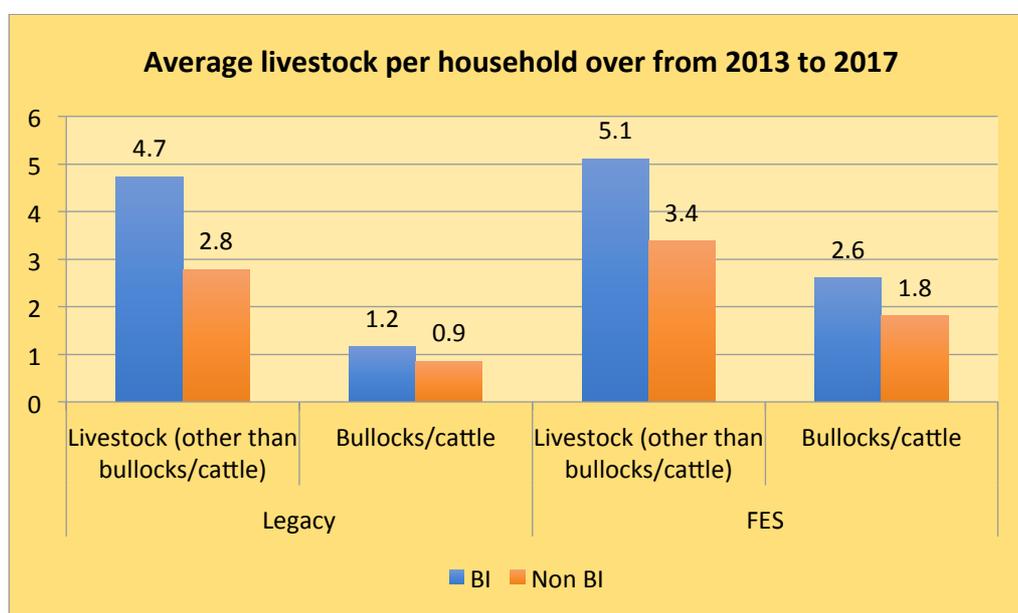
The data are clear. However, it was also shown by practical experience. The case study team reported that at the time of the baseline they were rarely offered tea by respondents, because few had enough milk. During the final evaluation survey, they were offered tea in most places, with cow and goat milk. The general change was clear. As one man put it:

‘As everyone in the village was receiving the basic income, some paid their debts, some bought cows or oxen worth 6,000 Rupees each. Some bought goats for 5,000 Rupees. About 15 people in the village bought goats in this way. Eighteen people bought hens, eight bought cows, to give milk for home consumption.

We bought the goats for rearing. One goat produces at least two kids in six months and four in a year. We sell the male kids and keep the females. One kid can be sold for 6,000 Rupees. We go to Mhow and Manpur-haat (bazaar) on Saturdays and Tuesdays to sell the kids. In the same way, we sell the chicken; one can sell for 400 Rupees. Overall, in the two harvest seasons, we earned over 2,000 Rupees in the village from all this.'

Much of this change was observed in the 2017 legacy study where families in Ghodakhurd had many more livestock than in the control village showing a momentum effect

Chart 14 : Average livestock per household over from 2013 to 2017



Box 2: Case Study

The Story of Tulsabai

Tulsabai has two sons and two daughters. The eldest son who is 24 years old is studying the second year of Bachelor of Commerce degree in Mhow Degree College. The second son is 18 years old and studying class 10. Her first daughter never went to school and was married away at a very young age. She and her husband work as construction workers. They have two children. Her second daughter studied till 10th class and does stitching at home. Two years ago, her first daughter and son-in-law came away from their village and started living with Tulsabai.

The boys in addition to studying also go to wage work in the nearby villages in the potato processing units.

Tulsabai's husband Bhanvar Singh Davar works on the half an acre farm that they own, and also takes the cattle and the goats for grazing. They cultivate soya bean and wheat. They have a motor to pump water from the pond. They pay Rs. 5 to 6 thousand per annum for electricity. Tulsabai used to work as an agricultural worker and went to the nearby villages for wage work. During harvest time she normally used to go and stay in the neighbouring villages along with others from her village during the entire season. In these villages, the main crops are onion, potato, garlic, soya bean and wheat.

Five years ago, the family owned three goats and it was the job of Bhanvar Singh to take them to the jungle for grazing each day when he went to the farm. During the BI pilot, Tulsabai bought one more goat. Within eighteen months the four goats became ten. Then Tulsabai sold all the ten goats for Rs.30,000, and added 15,000 they had from selling the agricultural produce, and bought a buffalo. They met a milk seller in Mhow and began supplying milk to him. The milk seller advances money for the fodder and also lent them money to buy another buffalo which they repay by giving him the milk. After a year, they bought another buffalo. Once they repaid, they tied up with a sweet shop owner and made a contract with him to supply *mawa* condensed milk which is the main raw material used for most of the sweets. Tulsabai stopped her wage work a year and a half ago and began working full-time on making *mawa* at home. Each day her son when he goes to the college, takes the *mawa* to deliver at the sweet shop.

During the monsoon months, Bhanvar Singh gets fresh grass from the neighbouring jungle and takes the animals to graze every day. In the dry months, they buy fodder from the market, and pay upto Rs.6000 per annum.

By April 2017, at the time of our field work, Tulsabai's family had one bull, four buffaloes and two calves. The first daughter has shifted to Tulsabai's place along with her family. The two sons are both studying and working. Tulsabai also bought a stitching machine, and the second daughter who discontinued her studies after tenth class operates it and does stitching. She earns a small amount of money through this. The ageing Tulsabai decided to discontinue wage work in the neighbouring villages and continues her milk processing enterprise.

Tulsabai's story is a major story of transformation triggered by one year of basic income.

Fishermen’s Cooperative

Ghodakhurd village has a pond that is at its center constructed in 2009. Six young men from the village made their first attempt at fish-farming. Which failed in a big way since all the fish died. The group got disheartened and abandoned the project.

In 2012, when the Basic Income experiment began, it gave this group a new energy and also much-needed capital to make another attempt. This time the group expanded to 13 men who contributed Rs.3000 each and made their second attempt at fish farming. This year the harvest was very good and they harvested plenty of fish. Some of it they sold in the village itself, and the rest they sold at the weekly market.

The total sale of fish gave them Rs.60,000 which they deposited in the bank. They did not distribute the profit. The next year again they bought fish seeds with Rs.25,000. The rest of the money the cooperative decided that it will be lent to whoever is in need in the village as an interest-free loan. The borrowers return the money through monthly installments.

These two streams of activities still continue. On the one hand the cooperative does fish farming and on the other hand the rest of the money functions as a revolving fund to the villagers. At the time of this field work, i.e., April 2017, the cooperative had lent nearly one lakh rupees.

The momentum and persistence effects in agriculture and livestock have ensured that the villagers in Ghodakhurd have a higher level of earned income than those in the control village even four years later.

Average income (earnings) has increased from baseline to FES and legacy more so in the Treatment village than in the Control village. The improved incomes show a *momentum effect* as a result of BI.

Table 11 : Average income

	Legacy		FES		Baseline	
	Treatment	Control	Treatment	Control	Treatment	Control

Average Rupees						
Per month	3500	2164	3296	2398	1475	1847

8. Equity and Emancipation

The Evaluation surveys which were part of the basic income pilot paid especial attention to impact on the more vulnerable groups. Women were of course the largest such group, but others included the disabled and the elderly.

The pilots involved four features rarely found in social policy, which taken together provided the more vulnerable, especially women, with increased choices. The first was that they were designed to test the effects not just of the basic income itself but also those of a ‘Voice’ organization, SEWA, whose main objective is to bring women together to increase their sense of empowerment and solidarity. The underlying hypothesis was that SEWA would enhance the positive effects of the basic income.

A second feature is that the payment of money was *individual* – given to women and men separately, as individuals. A question was whether the woman retained control over the money, or at least enough to be able to have a strong influence on how the money was spent. Implicitly, it also meant asking whether the distributional effects would have differed had the money just gone to a household ‘head’ or to the family as a unit.

Third, the amount was *equal* for everyone, which made it progressive, since the average income of vulnerable groups was lower. So it was worth more for them. If they were mothers, the women received the basic income of their children as well, giving them greater control, potentially, over spending decisions on behalf of their children.

Fourth, as the basic income was *unconditional*, in principle women as well as men had a choice on how to spend the money.. Given the nature of intra-family decision making, it remained to be seen if they were actually able to exercise choices.

The people in the village, men and women, almost unanimously (over 85%) felt that the basic income had improved the position of women in the household, as can be seen from the table below

Table 12:
Improvement in the position of women in the household

Response	Treatment	
	No.	%
Yes	70	57.85
No	16	13.22
Yes, to somewhat extent	34	28.10
Other (Specify.....)	1	0.83
Total	121	100.00

There was a *pick-up* effect in women’s empowerment measured as intra-family decision making during the year. Between the time of the baseline before the pilot began and the end of the pilot one year later, in the basic income village there was a perceptible shift from a strong norm of the household head deciding on how income was spent to a weaker norm and a relative shift towards equal decision making, decisions by the individual himself or herself and the wife (Chart 15).

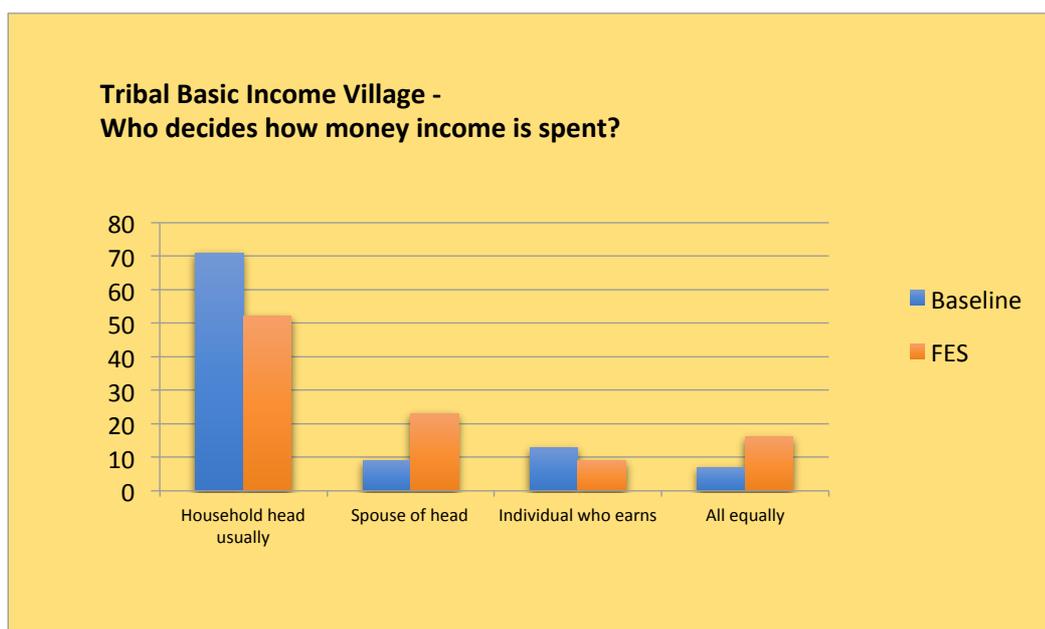
The evaluation survey questionnaire included a question on who made the decisions on using the money income, which accrues to the family. In the baseline, 71% of respondents said that it was the household head, whereas by the end of the year only 52% said the household head. The change within the basic income households as compared to the control households was highly significant statistically. Over the year, some respondents felt that decision making had shifted, with decisions being made more equally or even by the spouse rather than household head.

Much of this ‘empowerment’ effect lasted into the next four years. The basic income seems to have caused a behavioural change whereby the decision making in the households became more equal.

Chart 15 : Who decides how income is spent?



Chart 16 : TVBI - Who decides how income is spent?



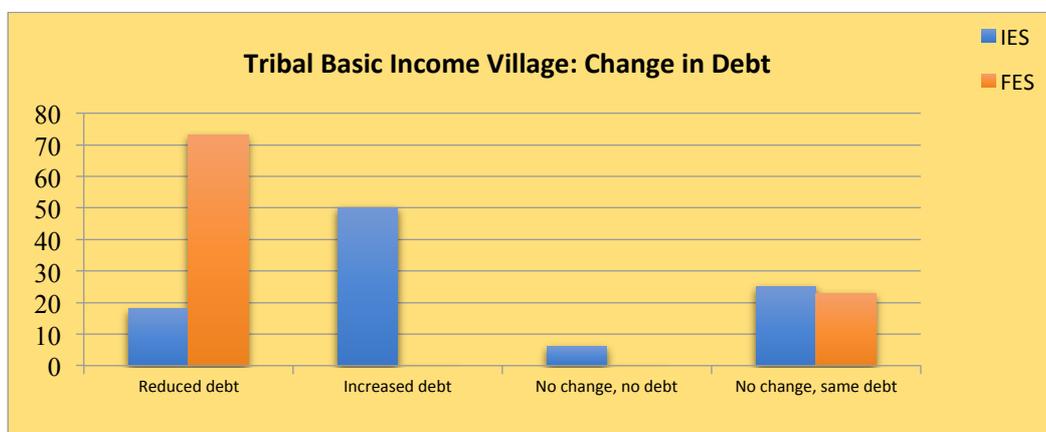
The decision-making in the household saw a significant pick up effect where the spouse’s role in decision making increased from 9% to 23% from 2012 and 2013 and this continue to further increase to 33% in 2017 in the BI village. However, we don’t find this in the control village. There has been virtually no change and infect, a bit of decline from 2013 to 2017. The *Momentum effect* shows increase in women empowerment in the BI village more than the Control village(DID=-2.42).

Table 13 : Who in the household usually decides on how money income is spent?

	Legacy		FES		Baseline	
	Treatment	Control	Treatment	Control	Treatment	Control
<i>Household head usually</i>	58.87	80.00	51.67	58.76	71.2	46.4
<i>Spouse of head</i>	33.06	18.10	23.33	17.53	8.9	25.1
<i>Individual who earns</i>	4.84	0.00	9.17	14.43	12.7	12.3
<i>All equally</i>	3.23	1.90	15.83	9.28	7.2	16.2
<i>Total</i>	100.00	100.00	100.00	100.00	100	100

One of the important emancipatory effects that was seen during the basic income pilot was a freedom from crushing debt. Due to a lack of liquidity tribal families would have to borrow at high interest rates for every activity from daily consumption to economic activity to paying for health shocks. This continuous cycle of debt kept them forever poor and vulnerable and when the debt mounted too high they would have to go into debt bondage, particularly in the brick kilns. The basic income had an emancipatory effect with a major reduction in debt as can be seen in the figure below.

Chart 17 : Tribal Village Basic Income Change in Debt



How much of this emancipation was sustained? The data do not show any significant difference between the debt levels of the basic income and control villages as can be seen in the table below. Furthermore, 56% of the BI village and 47% of the control villages still borrow small amounts of money for purchasing provisions.

Table 14 : Do you owe money to a moneylender now?

Do you owe money to a money lender now	Treatment		Control	
	No.	%	No.	%
Yes	94	75.81	77	73.33
No	30	24.19	27	25.71
Don't know	0	0.00	1	0.95
Total	124	100.00	105	100.00

Of course, debt in itself may not be an indicator of being in a cycle of extreme poverty, as many types of debt are required for growth of enterprises, including farming. One of the important effects of the regularity of cash during the basic income period was that the families had more bargaining power with money lenders and could obtain terms which allowed them to maintain their independence.

In that regard, the Legacy data reveal that whereas the people in the control group who borrowed money from money lenders were paying an average of about 5% per month (60% per year), the villagers of Ghodakhurd were paying about 4% (48%) per year, and so had somewhat better bargaining power than the control group.

Box 4: Conversation with Farmers

Breaking the Vicious Circle of Debt: Conversation with farmers in Ghodakhurd Village¹⁶

¹⁶As reported by Sarath Davala

Basic Income experiment has successfully broken a very critical and regular practice of debt in the village. For seeds and fertilizers, Ghodakhurd farmers were mostly dependent on a landlord-cum-moneylender, who lives in a nearby village called Mend. The entire village used to be at his door step at the time of Kharif and Rabi sowing to borrow seed and later the fertilizer. The terms of this borrowing seed were that if they take one quintal of soya or wheat, they have to return the double, locally called Dugna, which literally means double.. The year villagers got basic income, almost all of them kept the wheat grain for sowing from their harvest (April) without selling it all away.

When the Kharif season came, none of the villagers went to the money-lender, and bought their soya seed from the market with the basic income money. When the harvest came, they saved the grain for the next season. During the Rabi season they used the wheat that they had stored from the harvest. . And since that year, nearly all of them continued that practice and never went back to the money-lender, at least for the seeds and fertilizers. At the time of the fieldwork (January 2017), it was reported that only about 5 to 6 farmers go to the money-lender for seeds and fertilizers.

9. Drop-back and Shocks

The one year of basic income had a transformative effect in the tribal village. The legacy study was done four years later and showed that the basic income led to both income effects and behaviour change. For some families, an income effect carried the momentum forward and these families were able to maintain the life-style they had adopted during the basic income, these were a minority ranging from 10 to 20% of the population. A larger percent—about 50-60% witnessed a partial but not a complete drop back. Through a mix of behaviour change and income effects they were able to maintain a life-style better than what they had before and better than the control group.

However a minority, maybe one-fifth to one-third, dropped back to their earlier state of poverty. Some men in these families went back to the brick kilns into debt bondage, the children dropped out of school and went to full time work, women sold their livestock and went to work as labourers. Had the basic income continued perhaps these families would not have entered the cycle of poverty.

One of the questions asked in the questionnaire was “*Is there anyone in the household who is currently working unpaid for somebody in order to pay off debt*”. In the FES, the number of families who reported this form of debt-bondage were significantly lower in the Basic Income village at 9% than in the control village, which had 18%.

In the intervening four years, although debt bondage has fallen for both villages, it is now higher in Ghodakhurd with 19 persons bonded (4%) than in Bhilami, where it is only 8 (2%). Furthermore, only 3 of those 19, could pay-off the debt, and must continue as bonded labourers next year, whereas in Bhilami all have paid off and been freed.

The case-studies in Boxes 3 and 4 show the dynamics of employment choices households make and the fact that their situation keeps shifting both up and down, depending on several factors. For instance, health shocks or sudden expenditure on a family ceremony immediately results in borrowing large amounts of money which can be repaid only through the labour of either the man of the house or sometimes even the entire family over an extended period of time.

Box 5: Case Study

Hariram and Manjubai: Escape from Bonded Labour

Hariram and Manjubai are landless labourers. Because of Manjubai's illness, Hariram is the only one who does wage work. Hariram who has been a naukar on and off, said:

“The employment options within the village are limited, so we have to look for wage work in the neighbouring villages. Nobody likes to work as a Naukar, but my situation is particularly bad because of not having land of my own and my wife suffering from joint problem for which we have been spending money. Last year we did a hip replacement for her. Now the doctor is saying we have to do it for the other hip also. We have been in debt continuously. As soon as the basic income started in 2012, we didn't need money for every day needs, so I went to the brick-kiln because there I get at least 200 rupees a day, so that if there is a medical emergency, I can borrow from the owner. In a brick-kiln, you never get a regular wage. He calculates all the wage that he owes me once a year, and deducts all that I have borrowed.

After working in the brick-kiln that year, I realised, life is too hard there, and with the basic income my family was managing, why should I be a bonded labourer? Normally, the facility of borrowing easily is what makes that job attractive. My wife told me since the basic needs were met, why don't I choose another employment which was not so bad. So I went to the shop-keeper in Choral Dam and asked him if I can work with him. He agreed, and since then, I have been working in the shop. He also has a farm, so I sometimes work on his farm. He is a nice man, and he also lets me borrow from him without interest. For my wife's hip replacement surgery, government supported me up to 2 lakhs, and I had to spend nearly 50,000 which I borrowed from the shop owner. Today, I am not a bonded labourer; that is because during that year when we received the basic income, we felt secure and were not desperate. We saw something new. That It is possible to choose another kind of work”.

Box 6: Case Study

Radhabai Davar: Shocks lead to a drop-back into the Naukar System

Radhabai Davar is 35 years old and has three children. At the time the basic income experiment happened (2012) her three children were studying in school. Her husband Prem Singh was working in the Brick-kiln the previous year. Four months after the basic income experiment started, he borrowed some additional money and repaid the debt to the brick kiln owner and released himself from the debt bondage. He then took up a water contract for 4 months which would give him enough grain for the whole year, and some cash. Since for day-to-day needs the BI money was there, there was no need to worry about borrowing money regularly.

Further, many other changes came about in their life and assets. Radhabai discontinued wage work and began cultivating their 2 bighas land by purchasing seeds. They also bought two goats which by the next year became six. Then they also bought a cow and two buffaloes.

This apparent upward swing in their life took a dramatic turn downward in the subsequent three years. First, Ranjita, the daughter developed severe gynaecological issues and had to be hospitalised and subsequently had to discontinue her school. Then, it was Radhabai who developed high blood pressure and also a stomach ailment for which again they had to borrow money for treatment. Two years ago, their elder son Vinod during harvest season at a landlord's house in the neighbouring village, fell from the terrace and broke his leg. All these major health shocks made the family to make adjustments again. Prem Singh went back to the brick-kiln in debt bondage. All the three children discontinued their studies and began working. The daughter and the elder son subsequently joined their father in the brick-kiln. The story of Radhabai is a story that shows the vulnerability of a family in poverty. The family indeed has the aspiration to move out of poverty, and they grab every opportunity to do so. However, one or two major health shocks can have a devastating and lasting negative impact on that effort they want to put in getting out of poverty.

10. Continuing Basic Income

One year of basic income was transformative for these tribal families who are at the bottom of the economic and social pyramid. Even when the basic income stopped, many of them, through hard work and behavioural change were able to have a somewhat better life than before. Some fell back into extreme poverty, mainly due to shocks.

We have recommended that a basic income should be Government policy for tribal villages. We asked the respondents how they thought that such a policy should be administered and at what amount of cash.

In the pilot cash was paid to each individual separately and the children's share was paid to the mother. This enabled each person to spend the money as they liked and perhaps benefitted the most vulnerable.

A 55-year-old Bhil woman, an agricultural labourer by trade, who was asked in 2013 about how the cash grant money was being spent in her household said that the money for her disabled son is used only by him.

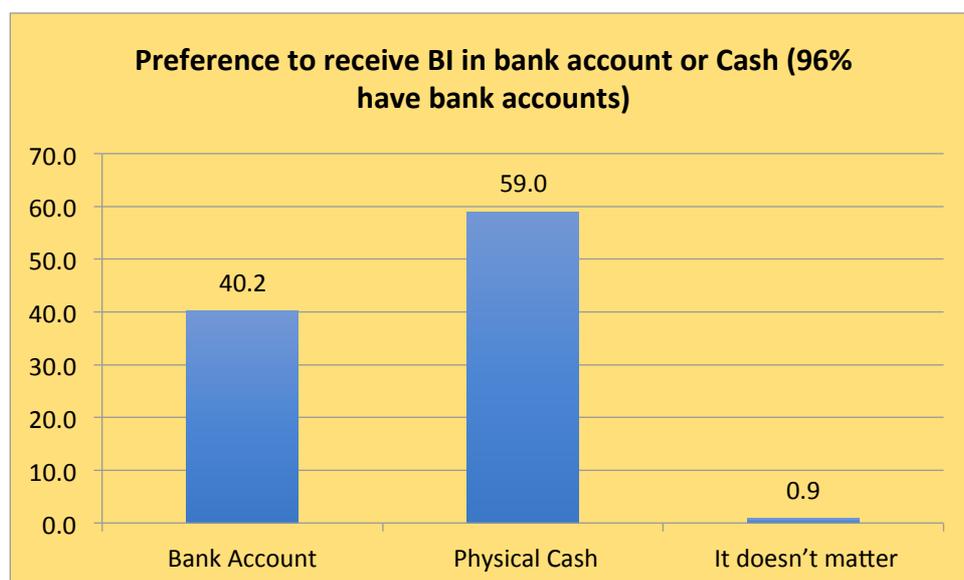
“I don't take his money at all, sir! He studies, so he needs that money for his books and conveyance to go for tuition. He withdraws from the bank whenever he wants money for his studies. So far he has withdrawn twice: 600 and 500. With the 600 rupees he had his tricycle repaired. It has been lying around because we didn't have money to have it repaired. With his second withdrawal, he bought clothes and paid tuition fees.”

On the other hand many families pooled their money to buy assets or pay for education. For example, as seen earlier, 13 men pooled their money to start a fishing business.

Keeping these ways of using money in mind, the families were asked whether they would prefer that if basic income were to become policy, would they prefer to get it individually, or should it be given to the head of the household. A majority, 59% said that the basic income should be paid to each individual separately, which is what was done in the pilot, and 41% said it should be paid to the head of household.

The basic income pilot undertaken four years ago was in 22 villages of which 20 were “general” villages and 2 were tribal villages. In the general villages cash was transferred into bank accounts, but in the tribal villages physical cash was given each month.¹⁷ However, by 2017 almost everyone in the villages had a bank account. Nevertheless, a majority at 59% said they would still prefer to receive the basic income in cash.

Chart 18 : Preference to receive BI in bank account or Cash



In the debates on the basic income, the amount to be paid is a major issue. On the one hand an amount which is too small would have little impact on people’s well being. On the other hand the national budget has to be able to accommodate the basic income. In the BI pilot, the amount was calculated at about 50% of the poverty line, Rs 300 was given to each adult and Rs 150 to each child. The reasoning was that it should be less than people receive for employment, but large enough to make a difference.

The respondents were asked how much they thought a basic income should be. The average that they recommended was Rs 545 per adult, which is well below the poverty line of Rs 893

¹⁷This was because the pilot in the tribal villages was started 6 months later, on the request of the Government of MP. Practically no one had a bank account in these villages and the opening of accounts would have taken at least three months. Furthermore, the banks were much further from the tribal villages than they were for the general villages. So, in the interest of the study, it was decided to distribute physical cash in these villages.

per person per month. In fact, if we have the same principle that was used in the pilot that a child gets half of what an adult gets, then the basic income for the family as a whole would be 45% of the poverty line.

Conclusion and Recommendations

On the whole, the study establishes convincingly that a basic income given for a reasonable duration can trigger forces of positive change in communities and can powerfully lead to a process of people pulling themselves out of poverty trap. What is particularly interesting about this particular case that we have experimented and now went back after four years is that even if a basic income is provided to the poor for a short period of one year, it can have lasting transformational and emancipatory effects. The **Momentum and Persistent Effects** described above tell us a powerful story about what a **regular and unconditional** income does to people's lives; how it unleashes their own ingenuity and energy. Such dynamism as witnessed here is often missing in several of the schemes and programs run by the government.

Further, the study also proves the value of pilot studies and the insights that provide us in understanding the micro processes underlying transformation and change in the lives of the poor.

The results of this Legacy Study come at a time when a unique convergence of circumstances is taking place in favour of the idea of unconditional basic income in India. On the one hand, the Government of India is actively considering the basic income model as a potential social policy option¹⁸. Two months after the release of the Economic Survey 2016-17, SEWA Bharat and INBI¹⁹ organised a national conference that brought together some of the best minds that are actively thinking about unconditional basic income. What was revealing and interesting in the conference was that these minds come as much from the academia as they do from the world of politics. There is a great deal of interest that has been generated on this subject across the layers of the intelligentsia.

Based on the results of this Legacy Study, SEWA Bharat and INBI strongly recommend the following next steps in taking the conversation on unconditional basic income forward on

¹⁸Please see Chapter 9 of the Economic Survey 2016-17.

¹⁹India Network for Basic Income

the one hand, and equally in actively participating in the policy-making and providing active support to the pioneers in politics who are eager to take this idea to its logical end of implementing it.

1. To initiate two types of Basic Income pilots. The first one requires working with governments that are enthusiastic such as Jammu and Kashmir and Odisha. The J&K government has already done a good deal of ground work on the fiscal feasibility and is awaiting central government's approval of the idea. So, this is one domain where pilot studies can be taken up.
2. The second type of pilot studies is to select certain specific demographic groups and introduce unconditional basic income pilot studies to understand the transformative and emancipatory dynamics so that on the basis of that understanding, one can work with different state governments. As the GST regime unfolds, the state governments are in a major transformative phase; so this would be an ideal time to introduce changes in welfare spending.
3. Another related series of activities that need to be done at the state government level is to work on the analysis of the existing welfare spending and hold workshops and initiate a conversation regarding the design and delivery questions concerning welfare spending.
4. To establish an Independent Commission on Unconditional Basic Income comprising of eminent Thought Leaders from academia, corporate sector, journalism and politics. The Commission would come up with a visionary document on Unconditional Basic Income that would become a reference point for discussion in India and other countries in the world that share similar socio-economic features.
5. Measures to strengthen India Network for Basic Income and other similar national and local bodies to anchor the conversation, and promote evidence-based and healthy debate on unconditional basic income.