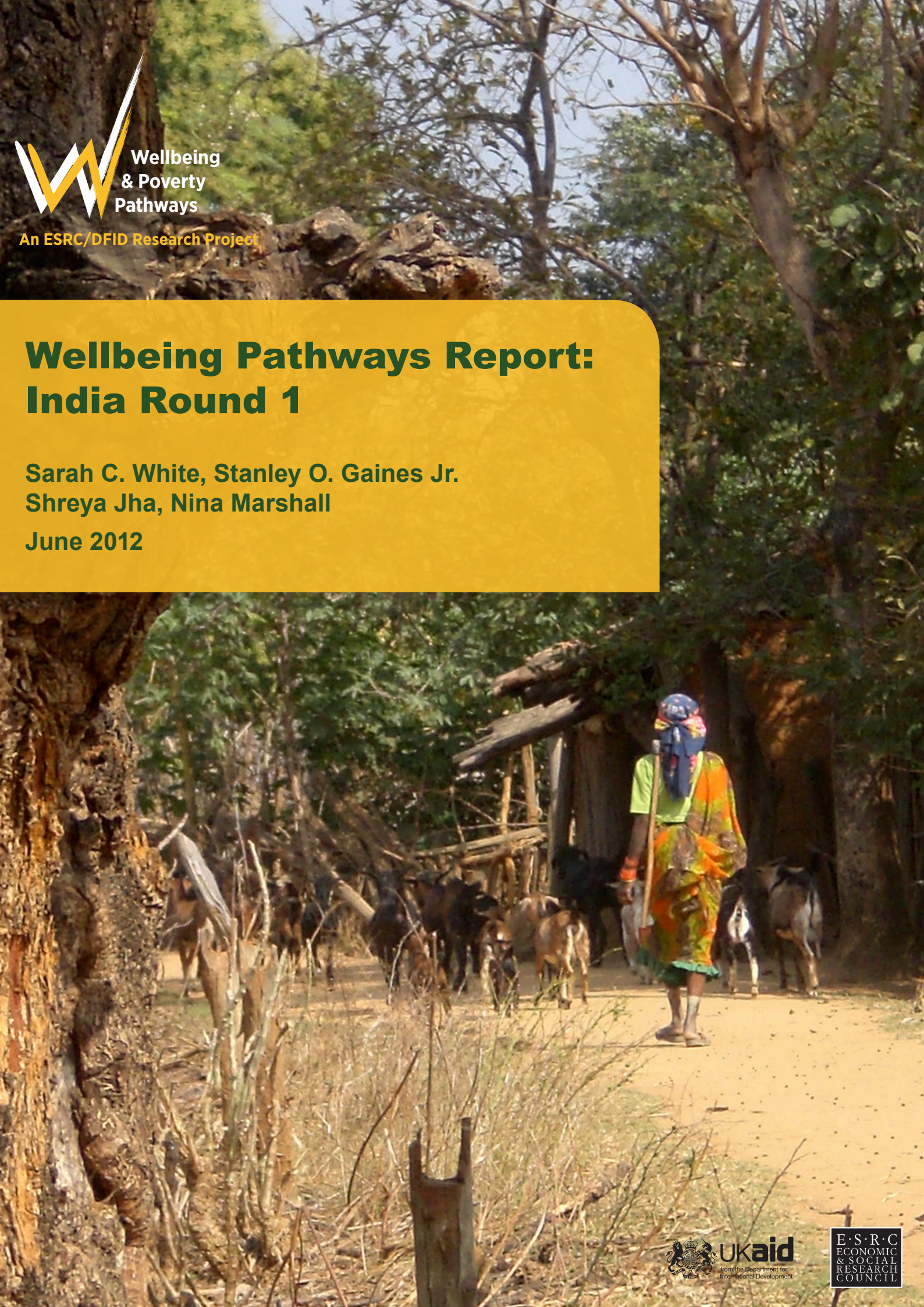

Wellbeing & Poverty Pathways

An ESRC/DFID Research Project

Wellbeing Pathways Report: India Round 1

Sarah C. White, Stanley O. Gaines Jr.
Shreya Jha, Nina Marshall

June 2012

UKaid from the Department for International Development

E·S·R·C ECONOMIC & SOCIAL RESEARCH COUNCIL

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With thanks to Chaupal and Gangaram Paikra, Pritam Das, Usha Kujur, Kanti Minjh, Dinesh Tirkey, Abhay Xaxa

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Executive Summary

This report provides preliminary evidence about wellbeing and poverty in rural Chhattisgarh, India, using the multi-dimensional model of wellbeing developed by the Wellbeing and Poverty Pathways research project.

Our research begins with the following definition: 'Wellbeing is experienced when people have what they need for life to be good.' This places subjectivity at the centre, linking together experience, resources, needs and evaluation. It is phrased in collective terms, but is also open to individual interpretation. It seeks to recognise connections between the experience of wellbeing and the external conditions in which people live their lives

The Wellbeing Pathways approach has three key features:

1. A seven domain model of wellbeing: economic resources, agency and participation, social connections, close relationships, competence and self-worth, physical and mental health, values and meaning
2. Integration of objective and subjective perspectives on wellbeing, from the external environment to *inner wellbeing*: what people feel that they can be or do
3. A framework for analysis:
    - what *constitutes* wellbeing (the seven domain model and different layers of assessment)
    - what *enables* wellbeing (the wider environment or context in which people live their lives, and how this enables or constrains opportunities to achieve wellbeing)
    - what *mediates* wellbeing (factors like gender, economic status or political connections which may influence which kinds of people have a better chance of experiencing wellbeing than others)

Methodology

Our research involves two rounds of fieldwork of 3-4 months each in India (Chhattisgarh) and Zambia (Chiawa). In each location and each round we aim to survey 350 respondents. The survey combines questions about objective and inner wellbeing. An intensive qualitative method of piloting and reflection was used to generate the inner wellbeing scale. Additional qualitative data were generated through interview, observation and group discussion. However, this report draws only on survey data.

This report is based on fieldwork in Sarguja district, Chhattisgarh, February-May 2011. The UK based team worked in collaboration with four local researchers and Chaupal, a local NGO. The support of Chaupal was critical in gaining access and co-operation in the villages, and a source of ongoing advice and reflection. We surveyed 158 married men and 156 married women (with complete data from 149 couples) and 26 women heading households. The respondents came from four predominantly Adivasi (tribal) villages. We call these Central, Hill, Forest and Dry Land, reflecting their contrasting natures. They also differ significantly in economic terms: Central and Hill are doing better overall, and Forest and Dry Land are doing worse.

Community: Respondents span 13 communities, which (based on Indian census categories) we group into five status groups: Scheduled Caste or SC; Scheduled Tribes 1 or ST1; Other Backward castes or OBC, Particularly Vulnerable Tribal Groups or PTG; and Scheduled Tribes 2 or ST2. SC respondents are by far the poorest; ST1, OBC and PTG are at a similar economic level; and ST2 are doing significantly better than other communities. Most couples come from the same community.

Religion: 57% of respondents follow Sarna Dharm, the traditional Adivasi form of worship. 35% respondents are Hindu and 8% are Christian. Christians are strikingly preponderant among the

wealthier ST2 community (21%). Those who practise Sarna Dharm tend to be of lower economic status.

Results: Objective Wellbeing

Marriages, household and children: Most marriages (72%) are monogamous first marriages. All single women have been previously married and only seven marriages involve one man with two wives. Married couples' average household size is 5.5 but for women-headed households it is far lower, at 2.15. Nuclear households are most common. Respondents report an average of three children. Twenty percent of children born to our respondents are no longer living. There is a marked imbalance in the sex ratio for children reported in households (59% sons, 41% daughters). Most children under 18 live at home, as do around one third of children over 18.

Education: Levels of education are low – 51% of respondents have no schooling; a further 21% can only write their own name. Men are considerably better educated than women and gender differences persist across all education levels. The educational situation of respondents' children is very different: 81% of 5-9 year olds are or have been in primary school; 65% of 15-19 year olds have at least some secondary schooling; and only 44% of offspring over 20 have no schooling or are only able to write their name.

Health and disability: 6.6% of members in married women's households are reported as disabled. In the smaller and poorer women-headed households, 25% of members are reported as disabled. Quack doctors are the most significant providers of healthcare.

Livelihood: The main livelihood activities are farming (90%), daily casual labour (90%), and the collection and sale of non-timber forest produce (75%). Slightly more men than women are collecting forest produce. Respondents doing less well economically report the impact of a decline in forest produce would have a greater effect on their lives than better off respondents.

Special positions: Most respondents do not and have not occupied a special position in the community, politics or government service. Among those who do, men predominate in roles within the social/ community hierarchy. Women occupy two-thirds of formal employment roles, although these tend to be very low level. The most gender-equal arena is formal politics. This suggests state activities have had an equalizing effect by gender, though traditional social positions of authority remain overwhelmingly in male hands.

Rice consumption and production: Respondents highlight the major difference that subsidized ration rice through the Public Distribution System (PDS) has made. The vast majority report not going hungry in the last year, although figures on how long they were eating own-grown rice suggest these communities are still in deficit in terms of food they can produce themselves. There is a significant correlation between the amount of paddy harvested and economic status, with the ST2s doing significantly better than the other groups.

Assets: Women-headed households have proportionately fewer assets of all kinds. There are significant differences by community in terms of ownership of latrines, chickens, goats, bikes and motorbikes, and the SCs come out lowest in possession of significant assets.

*Savings and loans***:** Almost two-thirds of respondents have no savings or assets set by to draw on in hard times, and for single women this rises to 77%. More than 80% of respondents have land on mortgage, incidence of mortgage rises with poverty, and is higher for single women. Most other loans are from friends/family and money lenders – only 4% of loans are from banks. Borrowing is common across all communities, though proportionately highest among the OBC. Of those who did not take a loan in the last year, 22% say they tried but could not get one. PTG and ST2 group members are least likely to report having tried but failed to get a loan.

Access to services: Villagers are highly positive about PDS. While 83% of people eligible for PDS report receiving it, this was somewhat lower for single women. The poorest group, SC, report the

worst access (57%) to PDS, as opposed to 98% in the PTG community. Both access and uptake of ICDS (Integrated Child Development Service) among those eligible are high overall. Dissatisfaction centres on timing (21% not on time), with fewer OBC and PTG reporting the timely receipt of ICDS. Almost all respondents are eligible for the National Rural Employment Guarantee Scheme (MGNREGS/NREGA). Access does not differ by community, and most taking up employment report it as available at an appropriate time and pay as correct. Women heading households are the least satisfied, with lower levels of access, take up and correct pay. Overall, however, there is great dissatisfaction on the timing of payment: only 4% of respondents report pay as available on time.

Mediators of Wellbeing

Findings on causal relationships between poverty and wellbeing must wait until the second round of fieldwork, but we can show a number of interesting correlations and highlight which factors appear more significant in shaping wellbeing.

We identify four potential mediators of wellbeing: economic status; gender/marital status; village; and community. Using a composite economic factor derived from our data, we see economic status is clearly related to both community and village. Gender/ marital status also predicts economic status: married women are doing slightly better than average, single women well below average, and married men above average. What makes the difference is not just gender but gender and marital status in combination: single women are doing significantly worse economically than married men or married women.

Subjective reflections on wellbeing: We asked people how well they have been doing over the last year, how their current situation compares to five years ago, and about their current level of happiness. Gender/marital status makes a difference in terms of people's comparison to five years ago and their overall happiness. Married men score higher than single women on both of these and there is a marginal difference between married women and single women on comparing to five years ago. Community predicts how respondents have done economically over the last year and their standard of living compared to five years ago, in particular ST2 doing better than ST1 for both. Community does not predict overall happiness. Village has no effect on any of the subjective wellbeing questions. Economic status strongly predicts all three questions – those who are better of economically score higher on the subjective questions. When we combine the economic and gender/marital status, no difference by gender/ marital is significant, in part because the economic factor and gender/ marital status are related.

Inner Wellbeing

We have explored the extent to which the four mediating factors predicted inner wellbeing scores both for each domain of wellbeing and for a composite inner wellbeing score derived from all seven domains. Economic status significantly and positively predicts inner wellbeing domain scores in all seven domains and the composite inner wellbeing score, and is significantly and positively correlated with the composite inner wellbeing score.

Gender/ marital status is a significant predictor of the composite inner wellbeing score and a significant predictor of inner wellbeing in four of the seven domains: agency and participation; social connections; physical and mental health; values and meaning. The fact that it does not predict the close relationships domain is surprising, but may be explained by the difficulty we had in finding appropriate questions for this domain: we are continuing to work on this for the future.
Village significantly predicts five of the seven domains of inner wellbeing, but when the economic factor is included with village this reduces the significance of village so it is only significant for agency and participation, and social connections. Village is not a significant predictor of wellbeing as a single factor. Community does not predict inner wellbeing whether measured as seven domains or as a single index. However, in these Adivasi villages community-based divisions are not as marked as in other parts of India where caste is a major factor. This finding should therefore be treated as preliminary, subject to further validation by studies in other parts of India.

Highlights from looking at the significance of the economic factor and gender/ marital status on the individual items from the survey that make up each domain include:

- *Economic resources:* the economic factor is a significant predictor of all items and in the expected direction (better off objectively corresponding to better off subjectively).
- *Agency and participation*: this is where gender/ marital status made the greatest difference.
- *Social connections*: most significant effects of gender/marital status were in the expected direction, although on the issue of having people beyond their immediate family to count on single women scored significantly more highly than married women.
- *Close relationships*: married women were significantly more likely than single women to say their family requires them to do things they don't want to.
- *Physical and mental health*: who was doing better varied by gender/marital status, but in different directions depending on the particular items.
- *Competence and self-worth*: the economic factor positively and significantly predicted three of the four items, but gender/marital status none.
- *Values and meaning*: the economic factor positively and significantly predicted all items. Married women were significantly more likely to fear harm from witchcraft or the evil gaze.

Conclusions:

What constitutes wellbeing?

- Principal component analysis (not presented here) supports both the seven domain model and single factor inner wellbeing index
- But the single index tells us very little: seven domains gives much more scope to explore variability between respondents and contexts

What enables wellbeing?

- These are extremely poor communities where positive change is occurring. Critical to this is the provision of welfare programmes by the state, complemented by political mobilization by local NGOs to ensure that people achieve the rights they are promised
- PDS rice is seen as particularly significant in this
- This shows that *politics and policies are critical enablers of wellbeing: wellbeing cannot be understood at the individual level only*

What mediates wellbeing?

- People's objective economic status has by far the greatest effect as mediator of wellbeing
- It has strong predictive power across subjective reflections on economic wellbeing and happiness, and on inner wellbeing as single index and across all domains.
- It is strongly inter-related also with the other mediating factors of gender/marital status, community and village
- Gender/marital status is the next most significant factor mediating inner wellbeing
- In general, the effect of these other factors is reduced when the economic factor is included alongside them in analysis
- This finding confirms other studies of economic status and subjective wellbeing, which find there is a strong association between these for people living in poverty
- Although the economic factor is highly important, there is considerable variance between respondents that it does not explain

Limitations

- This report of initial analysis, drawing on the first round of data collection
- There is an attempt to be sensitive to local context
- But this methodological approach carries a strong 'disciplining' effect requiring people to fit their lives into our categories
- Such surveys must be complemented by qualitative research to explore the depth and richness of local understandings, and the challenges these may bring to metropolitan constructions of wellbeing

Introduction

Wellbeing has caught the attention of policy makers and practitioners because of its potential to provide new perspectives on what matters and new ways to assess policy outcomes and their impact in people's lives. While people use the term wellbeing in many different ways, there are two broad areas of agreement. First, that wellbeing offers a positive emphasis on people's strengths and aspirations rather than a negative stress on deficits and deficiencies. Second, that it offers an encompassing approach which extends objective measures of human welfare to include some subjective assessment of quality of life.

While the idea of wellbeing may be attractive, its practical utility to development policy and practice is yet to be proved. To advance we require robust measures for assessing wellbeing on the one hand and clear evidence of the value added in adopting a wellbeing approach on the other.

This report presents initial findings from research which seeks to meet these needs. It describes a multi-dimensional model of wellbeing that has been generated and validated by the research project, and uses this to provide evidence about wellbeing and poverty in rural Chhattisgarh. The findings reported here are preliminary; they reflect a first analysis of the first round of data collection. Findings about how wellbeing and poverty are related over time will have to wait until our second round of data collection in 2013.

The report is structured as follows. It begins with a brief description of the Wellbeing and Poverty Pathways research, the model of wellbeing that we have developed and methods we have used. It then describes the communities where we are conducting our India research and presents initial social and economic findings from our survey. This leads into statistical evidence concerning the relations between poverty and wellbeing in these communities. The conclusion reflects on these findings and their implications.

The Wellbeing Pathways Approach

Wellbeing and Poverty Pathways is an international research partnership working in marginalised rural communities in Zambia (Chiawa) and India (Chhattisgarh), 2010-2013. It involves collaboration between the UK universities of Bath and Brunel, the G. B. Pant Institute in India, the international NGO Oxfam Hong Kong, and two national NGOs, Hodi in Zambia and Chaupal in India (see www.wellbeingpathways.org for more information). The project has two primary objectives. First, to develop a model of wellbeing that is grounded in the South, and is thus closer to the ways that people there think and talk and feel and act than are the dominant models which have been developed by psychologists in the West. Second, to use this model to explore the relationships between poverty and wellbeing – both quantitatively through a survey and qualitatively through more open-ended interviews.

Our research begins with the following definition: 'Wellbeing is experienced when people have what they need for life to be good.' This places subjectivity at the centre, linking together experience, resources, needs and evaluation. It is phrased in collective terms, but is also open to individual interpretation. It seeks to recognise connections between the experience of wellbeing and the external conditions in which people live their lives.

Wellbeing, Happiness, or Quality of Life?

While some commentators talk about wellbeing, others refer to happiness, or quality of life, or mix and match between the terms. There are no universally agreed definitions. The general consensus, however, is that happiness is essentially subjective. Some identify it as the experience of positive feelings and emotions or, as the psychologists say, 'affect'. Others criticise this as 'hedonic,' arguing for a more 'eudaemonic', or fulfilment focused, understanding of wellbeing as arising from a life of virtue and authenticity, rather than simply being focused on pleasure (Ryan and Deci, 2001). Quality of life may be assessed with either subjective or objective measures, but objective ones often predominate (Hagerty et al., 2001). Wellbeing straddles the two, connecting 'feeling good' subjectively with 'doing well' objectively. The picture is further complicated by the fact that the meaning of 'wellbeing' has changed over time (Sointu, 2005). From a more general concern with the state of society, wellbeing has come to be used in increasingly individualised ways (*ibid*.). Thus in psychology in particular, wellbeing is often identified as 'subjective wellbeing', which approximates to feeling happy in lay terms. This is usually measured through a combination of life satisfaction and weighing up positive against negative feelings (Diener, 2000).

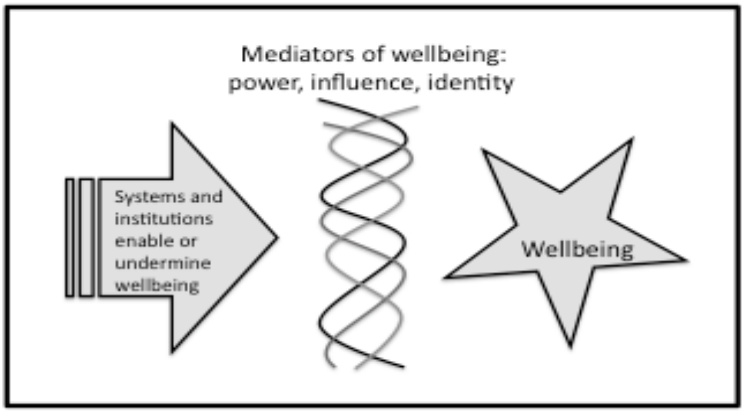
Our model of wellbeing is based in our own previous research and experience, together with relevant literature from sociology, social anthropology, psychology, development studies, wellbeing and quality of life research. From these starting points we have developed our approach through a range of methods: consultation with NGOs and other local people; intensive qualitative field testing; ongoing reflection within local teams; and, finally, statistical testing.

Two pieces of research have been particularly influential for us. The first was an earlier study of wellbeing in developing countries based at the University of Bath (www.welldev.org.uk). The Wellbeing in Developing Countries Research Group (WeD) identified three interlinked dimensions of wellbeing: the material - what people have or do not have; the relational - what people do or cannot do with it; and the subjective - what people think or feel (see Gough and McGregor, 2007; White, 2010).

The second influence was the Colombo-based Psycho-social Assessment of Development and Humanitarian Intervention (PADHI) and their 'social justice approach to wellbeing' (PADHI, 2009). This sets out a framework that we have adopted as core to our own model, the separate identification of what *constitutes* wellbeing – positive achievement in interconnected domains; from what *mediates* wellbeing – power, influence and identity; and what *enables* wellbeing - systems and institutions in the wider environment which critically contribute to or undermine the achievement of wellbeing. This can be represented in a simple diagram, as shown in Figure 1.[1]

[1] This representation of the approach is produced by Wellbeing Pathways, rather than PADHI. In PADHI's own diagram all of the elements are inter-related, which is of course more true to life. We present them as separate factors here in order to clarify the causal relationships we seek to investigate.

Figure 1: The PADHI approach to wellbeing



This introduces a political aspect to wellbeing which is critical for its application in an international development context. Resisting the individualism of much work on wellbeing, PADHI identify it clearly as a psycho-social phenomenon. Like PADHI, Wellbeing Pathways emphasises the importance of the wider environment or context in which people live their lives, and how this enables or constrains opportunities to achieve wellbeing. The mediators of wellbeing, which give some kinds of people a better chance of experiencing wellbeing than others, are a primary focus of our statistical analysis.

PADHI identify five domains of wellbeing which they describe in active terms. Thus for PADHI people 'experience wellbeing when they are able to: access valued physical, material, and intellectual resources; experience competence and self-worth; exercise participation; build social connections; and enhance physical and psychological wellness' (PADHI, 2009: 13). We largely adopted this identification of domains of wellbeing, but made two amendments. First, we added two domains. Research in Bangladesh, partly under the WeD programme but also preceding this, had shown that social and political connections are critical for enabling poor people to gain access to resources (Devine, 2002; 2007). Exploratory work on quality of life under WeD had also pointed, however, to the importance of close family relationships, as people had referred, for example, to 'a good marriage' in their definitions of what made for living well. We felt that this more intimate aspect of close family relationships was distinct from more political social connections, and so required a different domain. In addition, research on religion and wellbeing in India and Bangladesh had showed how closely intertwined these were (White and Devine, 2012). We therefore added a domain on 'values and meaning' to reflect this. The second amendment is that we identified resources in more explicitly economic terms. This followed extensive testing in the field which showed how much importance people gave to their economic circumstances in describing their experience of wellbeing.

Our own model of wellbeing thus identifies seven closely interacting domains, set in a wider environment which enables or constrains wellbeing. Wellbeing is seen as a process which emerges through interaction between the different domains, between the person and those important to him or her, and between the person and the broader environment, mediated in the ways PADHI suggests. The model should thus be seen as dynamic, rather than static, with flow and interchange between its different elements, and with recognition that all of this is culturally embedded.

Figure 2: The Wellbeing Pathways Domains of Wellbeing

In addition to identifying the domains of wellbeing, Wellbeing Pathways recognises the need to distinguish the different objective and subjective layers or levels at which these may be assessed. The intention here is not to suggest that information needs to be collected on every layer for every domain, but rather to provide conceptual clarity, so that we can be clear about which layer or level is being discussed. The layers approach to wellbeing is presented in visual terms in Figure 3 and in the text below, using the economic domain as an example.

Figure 3: The Wellbeing Pathways Layers of Wellbeing (economic domain)

- **Layer one concerns the objective conditions of the local environment**. In the case of economic resources, for example, this might be the range of livelihoods available locally.

- **Layer two is local people's subjective reflections on this environment.** In this case, how people view the range of livelihood opportunities; how they compare with the past and prospects for the future; the quality of living that can be gained from them and so on.

- **Layer three is the layer of objective wellbeing**. This takes things to the individual level in asking about the respondent's own livelihood, what he or she can get of the potential opportunities available.

- **Layer four comprises the respondent's subjective reflection on this objective wellbeing.** In this case, how satisfied is he or she with his or her livelihood, and why.

- **Layer five is the layer of inner wellbeing.** The focus on inner wellbeing arises from the concern to explore how people felt they could *be* or what they felt they could *do*. Rather than simply asking whether a respondent is satisfied with their livelihood, for example, this takes us down to a more interior level to ask what this means for how the respondent is in him or herself. How does the livelihood enable or disable him or her? Does it, for example, give freedom from economic worry or provide a source of ongoing tension? The term inner wellbeing thus signals a difference of focus from either subjective wellbeing or subjective quality of life. As a consequence we do not follow the methods associated with those terms.[2] Finally, the term 'inner wellbeing' allows us to be open to a quite fluid association between mind, body and spirit on the grounds that people in different cultural contexts see these things very differently.

[2] Typical methods would assess satisfaction plus positive affect in the case of subjective wellbeing (Diener, 2000) or goals/satisfaction gap measures in the case of subjective quality of life (Woodcock et al. 2009).

Methodology

We began working on our model of wellbeing in a pilot research study carried out with Oxfam Hong Kong in Zambia and Nepal in 2009 (White, 2009). This formed the basis for our current research, which involves two rounds of fieldwork of three to four months in India and Zambia. In each location and in each round we conduct a survey with 350 respondents. These comprise 150 couples, with husbands and wives interviewed separately, and 50 women heading households. The structure of involving husbands and wives followed from the frequent observation that relationships are a key dimension of wellbeing (see e.g. Camfield et al. 2009). We included a sample of women heading households because of widespread evidence that they are particularly prone to poverty and social exclusion. In India, these women were all either widowed or divorced; there were no women living alone who had not been married. A range of other methods are used to generate qualitative data. These include observation and informal discussion with local people, open-ended questions and requests for clarification when conducting the survey, group meetings and individual semi-structured interviews.

Fieldwork for the first phase of the present study was conducted in Chiawa, Zambia, in August-November 2010. Initial analysis of the Zambia data suggested some problems with it, so we revised the survey substantially before going to India, and spent more than a month grounding and piloting in Sarguja district, Chhattisgarh, before producing a final version. This began with an initial scoping visit in December 2010, and continued into the main fieldwork period, February to May 2011.

There were two main differences in our approach across the two countries. First, in India we worked in only four villages, and so got to know each of them quite well, while in Zambia we worked in a larger number of smaller settlements, so gained a stronger sense of differences by region than by village as such. This reflects local patterns of settlement in the two research locations. Second, in India we worked more closely with our partner NGO. This reflects the different approaches of the two partner NGOs. In India, Chaupal is very much a local organisation working in and through local people, whom they motivate to mobilise villagers to claim their entitlements from the state. Hodi is a Zambian national NGO, which provides certain inputs as required by its client groups, but remains at arm's length so as to encourage local initiatives and discourage dependence. In what follows we focus on the India research, but in most respects our methodology was identical in Zambia.

We began our scoping visit to Sarguja with a general discussion of local issues with some Chaupal staff and others they had invited as people with special knowledge of or insight into the area. The following days were spent in the villages themselves, beginning to get a sense of their environment and initiating the process of grounding and piloting, which we continued in the first part of the main fieldwork period. In this initial phase, as in the main fieldwork period, our first introductions within the villages were with people who themselves worked with Chaupal as local organisers. The villages where we conducted our research were predominantly Adivasi, ethnic minority communities which have since colonial times been targeted by the state as in need of distinctive treatment, of either 'protection' or 'upliftment'. They thus have a long history of problematic relationships with outsiders.[3] There is no doubt that the goodwill that Chaupal enjoyed in our research villages was critical to people's readiness to talk to us.

The main focus of the grounding and piloting was to test out the survey and adjust it as necessary to fit the local context. This process was intensive, involving a total of ten weeks grounding and piloting in Zambia and India, as well as long discussion and multiple revisions amongst the team back at the office. A major concern was how much time the survey would take, since we knew that the longer it lasted the poorer quality data was likely to be. Since a large proportion of our

[3] For further explanation of 'Adivasi' see note 10, below.

respondents had little schooling, the survey had to be administered face to face. The following four principles therefore guided our survey design:

- First, only include what we think we will *use.* To include any question we had to be sure of the work it would do for us.

- Second, don't ask for unnecessary detail that makes answering onerous. This led us, for example, to shift from questions about how much land people farmed to questions about how many months they could eat from the land they farmed. It also means that we do not have the specific detailed questions about income, for example, which are common in many household surveys. To construct such data where people have multiple livelihood activities, many of which are only partially monetized, is never easy. In our case we felt that the kind of atmosphere we required to ask about inner wellbeing was not consistent with this kind of investigation. We therefore use an economic composite factor, which we computed from a number of different items, as our key economic indicator. This is described in more detail in Appendix A below.

- Third, try to make the process of doing the survey as conversational as possible so it should not feel to respondents like an interrogation. Even in the context of the survey we wanted to make space for stories and explanations of answers, which would give us a deeper sense of what was really going on for people. This meant taking time at the beginning introducing ourselves and setting respondents at their ease, and ordering questions in a way that would flow reasonably naturally. This, combined with the commitment to keep the survey as short as possible, also meant that we had to let go of our desire to work systematically through the various layers of wellbeing described above. To track all the layers, for example, we had included satisfaction questions after each of the objective ones, on e.g. education, health, and government services. Apart from the way this lengthened the survey, when we piloted it this simply didn't work. Having been told, for example, that a man's two children have both had to leave school for lack of funds, it seemed simply offensive to ask how satisfied he was with educational provision. The completeness and even elegance of a design in the office does not necessarily look the same in the field.

- The final principle was perhaps the most important: to try and pay attention to the way that people locally were thinking and talking about their lives. At base this is about the quality of *listening* in any research encounter.

Implementing this final principle involved not only attending to our research respondents, but also to the relationships that were built up within the team. In both places we recruited local people to work with – three in Zambia and four in India – who acted as peer researchers, mediating, interpreting and interacting between the local respondents and the external team members through the grounding and piloting process and on throughout the fieldwork. While the project directors could only visit for short periods, the research officer remained in the field for the entire survey period, along with a post-graduate researcher. Regular team meetings were held twice a week, to provide opportunities to share how things were going and discuss issues that had come up. The research officer spent time with all the local researchers in turn – more intensively at first but still on an occasional basis right through to the end of the fieldwork. These opportunities for ongoing support and collective reflection were vital for ensuring data quality and strengthening local researchers' skill development, as well as for sustaining spirits and identifying and addressing any problems as they arose.

While there were difficult issues to be faced in determining which questions to include at layers 2, 3 and 4, it was layer 5 - the questions about inner wellbeing - that took up most of our energies in the survey design. From the start we asked for responses on a five point scale, as a three point scale did not give us sufficient variability of response and anything beyond five points was too difficult for people to grasp. Our approach was similar to that of others in beginning with a simple agree/disagree and then moving to questioning whether they agreed strongly or weakly. We began

with statements in Zambia, to be in line with standard practice. However, in India we changed these to questions with a set of options for response, as these seemed easier for people to understand. In both India and Zambia respondents' most common reaction to the inner wellbeing questions was to ask for a context or example of what we meant. While we were concerned not to lead answers in a particular direction, we found that without any examples it was very difficult for people to give us a response. To ensure consistency across the different researchers, therefore, we agreed for each question what example would be given if respondents asked for clarification.

We also had a number of challenges in developing the appropriate format for questions. Some questions shifted between domains when respondents were answering them in a different way to what we had expected. We had to ensure that the way questions were phrased would elicit a range of responses. For the inner wellbeing questions we also worked hard to make phrasing status neutral, not closet objective, so that we didn't build in a bias of response according to economic status or gender, for example. We also had to ensure that phrasing was sufficiently personal, capturing how respondents were themselves affected, rather than general observations about how things are. This was a particular challenge in India, where many of these things are not matters people would normally speak directly about themselves, but indicate and imply through more general statements: 'the life of a woman!' (see e.g. Das, 2000; Wilce, 1998). In addition, while many studies hold that aspirations are important to wellbeing, in both Zambia and India questions about future prospects invited the response 'who can tell what the future will hold?' Many of the statements about the self were difficult: negative statements may be feared to attract the evil eye; comparisons with others may be seen as invidious; professing pride in one's own achievements may be seen as inappropriate.

There were also significant challenges regarding abstraction. Western academics and respondents are used to dealing with questions at a relatively abstract level. Such questions are required by research that involves statistical testing such as factor analysis, which seeks to derive a common underlying concept from people's responses to a range of statements. For village people in Zambia or India, however, questions are much easier to answer if they are more specific and tangible. This is in part due to the structure of the language itself: English is relatively direct and abstract; Hindi (for example) is much more indirect and concrete. It also relates to the kind of exposure people have had. We have tested our inner wellbeing scale (customised to fit the context) with UK student populations, who reflect the typical population used in psychological surveys. There are always some requests for clarification and expressions of discomfort at having to fit individual experience into a set of prescribed statements. In general, however, the students respond to the survey quite readily, because they are familiar with the moves it requires (abstracting and generalising from experience) and understand the conventions that frame such instruments.

Our respondents in Zambia and India, by contrast, have relatively little schooling and no past experience of this mode of questioning. One implication of this at the 'input' end is the need to spend more time with respondents in settling on responses and providing examples, as mentioned above. In terms of the 'output' of statistical analysis, it may also mean that the range of responses is less likely to conform to the 'normal' pattern[4] and that standard levels of reliability (the measure of how closely items within a domain correlate to one another) become rather harder to meet. Unfortunately we have not been able to find much discussion of this in the literature, perhaps in part because psychological surveys still tend to be undertaken with rather highly schooled populations. The most influential studies of subjective wellbeing undertaken with poor people in India are Biswas-Diener and Diener's studies in Calcutta (2001; 2006). These do hint at some areas of difficulty in applying the standard approaches[5] but do not discuss these in any depth.

[4] In technical terms, this means relatively high levels of skewness (responses clustering in one direction) and kurtosis (plotted on a graph, the responses do not give the shape of a normal bell curve).

[5] They mention, for example, that respondents found a seven point response scale difficult to manage, so they shifted to a three point scale, and that the standard correlations found in the Satisfaction With Life Scale did not work for one of the five items (Biswas Diener and Diener, 2001:342).

Ultimately we settled on a three section survey which aims to generate (self-reported) 'objective' information to complement the subjective inner wellbeing items across the wellbeing domains. It begins with a demographic section which includes (21) questions about the composition of the household, marital history, children, education and health. These are mainly layer three (self-report accounts of objective information), though some are layer four (satisfaction questions). The second involves (28) subjective questions at layer five, inner wellbeing. These are asked on a five point scale in which responses are tailored to ensure they are appropriate to the question asked.[6] The final section (17 questions) relates to economic resources and access to government services, again mainly at layer three. The survey closes with three overall review questions, two at layer four (reflection on economic position and standard of living) and one at layer five (a global happiness question).

In India in total we surveyed 158 married men, 156 married women and 26 women heading households. We had aimed at 50 women, and surpassed this figure in Zambia, but in India there were simply not that many women living without husbands in the villages we studied. Because of some cases in which the wife responded and the husband did not or vice versa, we have complete data from 149 couples. As an individual may not have answered a particular question, the count in some analyses varies from these overall totals.

For our respondents as a whole, the minimum age was 18; the maximum 80; and the mean 40. Married women ranged from 18-80, with a mean of 36. Married men ranged from 23 to 71. The group of women household heads was older on average. They ranged from 25 to 80, with a mean of 54.

The Research Location

In India our research takes place in four predominantly Adivasi villages in the 'remote' hill and forest areas of northern Chhattisgarh. As mentioned above, all of these were villages in which our partner organisation, Chaupal, was working. The historic marginality and exploitation experienced by Adivasi communities in India is well known (Bates, 1995; Sundar, 2007) and southern districts of Chhattisgarh have been heavily affected by Naxal activity.[7] Although there does not seem to be any live Naxal activity in these villages now, there has been in the past, leading some higher caste residents in neighbouring villages to move away. These are extremely poor communities, amongst whom hunger was commonplace before they gained regular access to highly subsidized rationed rice in around 2004/5. Literacy levels are very low, with more than half of our respondents reporting no schooling at all, and a further 20% being able only to write their own names. The mainstay of the economy is agriculture, with most people doing some farming, supplemented by casual labour and gathering of non-timber forest products. Agriculture is largely rain-fed. People are also struggling to get title deeds for the forest land they have occupied for many years. Although the

[6] For example, from 'never' to 'always'; or from 'not at all' to 'strongly'.

[7] The terms Naxal and Naxalite take their names from Naxalbari village in the Indian state of West Bengal where the Naxalite movement started in 1967. The movement is based on the radical far-left ideology espoused by the Communist Party of India (Marxist-Leninst). The main thrust of the movement is to incite a violent revolution to overthrow the state (and upper classes) which it views as anti-poor. Although the movement started in West Bengal it spread to other states including neighbouring Bihar (including Jharkhand) and Orissa, those parts of Madhya Pradesh that now constitute Chhattisgarh, Andhra Pradesh and Maharashtra. The movement has been consistently violent and draws its cadres from local people, particularly youth, who harbour animosity against the state for not having delivered on its promises of welfare entitlements. In Chhattisgarh this cadre is drawn largely from the Adivasi communities who have been particularly affected by policies concerning forest preservation/ commercialisation and natural resource extraction, both of which are abundant in Chhattisgarh. Both the central and state governments have retaliated in equally violent ways, resulting in loss of lives on both sides as well as of local populations (Gaur and Patnaik 2008, Ray 1988, Sundar 2007). For more detail on the movement in Chhattisgarh see Gaur and Patnaik (2008).

Forest Rights Act of 2006 recognised their rights to make such claims, implementation has been much slower in practice.

The villages were chosen to provide a range of contrasts. These are reflected in the names we have given them: Central, Hill, Forest, Dry Land. Forest is the least accessible. As its name suggests, it is quite deep in the forest, and can ultimately be reached only via an unmetalled road and crossing a shallow stream. The closest market is about three km away. There is a primary school and two Integrated Child Development Scheme (ICDS) anganwadi (child care) centres in the village. However, the anganwadi worker only visits once a week, leaving the helper to distribute the food to the registered children on the other days. Some people also send their children to the mission school about five km away, or to the market village for secondary school.

Hill, as its name suggests, winds its way up a hill, with a road that was recently metalled under the Pradhan Mantri Gramin Sadak Yojana (Prime Minister's rural roads scheme). It is made up of about 20 hamlets, or 'para', which have settled into habitable nooks in the sides of the hill. The largest community is the Pahari Korwas, who were earlier classified as a 'primitive tribal group' (PTG) or what has since been changed to 'particularly vulnerable tribal group' (also PTG). They have been the target of a number of special schemes for their 'upliftment', which are looked on with envy by some other local inhabitants, and are perhaps responsible for the fact that they make up the second most prosperous category within the study population (see Table 5 below). The village has three government primary schools and four ICDS anganwadi centres.

Dry Land is nearer to the district town but off the beaten track. Many people depend on day labour and the collection and/or sale of forest produce since farming is difficult, with no mechanised irrigation nor streams or rivers close by. There is an ICDS anganwadi centre and government primary school, but it is not clear how well they are used or whether a teacher comes and children go to school regularly. This is the poorest village, but there is within it a hamlet of one of the more prosperous Adivasi groups (the Oraon), where people are noticeably better off.

Central is the most prosperous and most easily accessible village, being close to the block (sub-district) headquarters. It is a large village surrounded by intensively cultivated fields, with a river close by. The dominant community, the Kanwar (Adivasi), are spread throughout the village, with other communities being more localised. Farming is the mainstay of village livelihoods, followed by the collection of non-timber forest products. There is less dependence on daily labour than in the other villages. There are two government primary schools, two ICDS anganwadi centres and one secondary school in Central. The closest health centre is in a neighbouring village, and the closest high school is on the main road just at the turning for Central. Some people also send their children to private schools in the block headquarters, the mission school or other larger villages.

As suggested in these brief sketches, the villages differ significantly in economic terms. We computed an economic factor using a combination of asset holding, education, main sources of livelihood, paddy harvested, months eating own paddy, months going hungry (reverse coded), savings, and land given on mortgage. More details on how we created the factor are given in Appendix A below. The economic factor establishes the mean as 0. The more negative the score is, the worse is economic status. The more positive the score, the better is economic status.Table 1 shows the figures for the economic factor by village.

Table 1: Village by economic factor

	Number of respondents	Economic Factor Mean
Dry land	51	-.52
Forest	42	-.25
Hill	107	.16
Central	98	.20
Total	298	.00

Comparing villages against one another, it is clear that there is a two way split, with Central and Hill being more similar to one another and doing better overall, and Forest and Dry Land being more similar to one another and doing worse overall. Thus the economic factor shows no significant difference between Central and Hill, nor between Forest and Dry Land. However, Central is doing significantly better than both Forest (p=<0.05) and Dry Land (p=<0.001). Hill is doing significantly better than Dry Land (p=<0.001) and marginally better (p=<0.1) than Forest.[8]

Communities

In all the respondents spanned 13 communities. There was no attempt to select by community; we talked to everyone in the study villages who would talk to us. As a result, we have a near representative sample for these four villages as a whole.

For analysis, we grouped the communities into five status groups. The first is a very small Scheduled Caste (SC) group (seven people), many of whom were intermarried into other groups. The largest proportion (63%) of our respondents came from the Adivasis. In naming these we followed the Government of India census category terminology of Scheduled Tribes, rather than the socio-political category of 'Adivasis'.[9] We split these into two groups (ST1 and ST2) according to our observation of differences in social and economic status. As shown below in Table 5, these observations were confirmed statistically, with the ST2 group scoring significantly more highly against our objective economic index than all the others. The ST1s include Agariya/Lohar, Majhi, Majhwar, Pandu people. The ST2s include Gond, Kanwar, Kerwar, and Oraon. A further 20% of our respondents came from the Other Backward Castes (OBC), including Painika, Rajware, and Yadav castes. Fifteen percent are labelled 'Particularly vulnerable Tribal Groups' (PTG) - the Pahari Korwa.

Table 2 shows the total population of these villages within each of these categories, and the corresponding number of our respondents. These were figures we gathered when profiling the communities.

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[8] *P* values are measures of significance, which record the probability of an outcome arising from a random sample. The smaller the *p* (probability) the higher the statistical significance of the result. Thus in this case the strongest significance (probability of this result occurring randomly is less than 1 in 1000, or $p < 0.001$) is found in the difference between economic factor scores of Hill and Central compared with Dry Land. Conventionally, a *p* value more than 0.05 and less than 0.1 is considered to show marginal significance.

[9] 'Scheduled Tribes' is a term introduced by the British to designate groups who were deemed to be in need of special programmes for state uplift and protection. 'Adivasi' came into use in post-colonial times (Sundar, 2007) and literally means 'dwellers from the beginning,' though the legitimacy of this as a historical fact is disputed (e.g. Bates, 1995). It provides a common identity and claim to resources against the division into separate 'tribes', and is often preferred because the term 'tribes' is seen as carrying both inaccurate and pejorative associations. However, the STs are not entirely coterminous with Adivasis and there are at least some Adivasi groups which are not classified as ST (Bijoy, 2003).

Table 2: Total Population and Sample Population by Community

	SC	ST1	OBC	PTG	ST2	Total
Total Population (households)	7	112	82	86	153	440
Percent of Total Population	0.02	0.25	0.19	0.20	0.35	100
Percent of Sample Population	2	33	20	15	30	100

Table 3 shows the number of respondents within each of these groupings, divided by gender and marital status. Table 4 shows the distribution of communities across the villages.

Table 3: Community by Gender/Marital Status

Community	Married men	Married women	Single women	Total
SC: Ghasiya	2	4	1	7 2%
ST1: Agariya, Majhi, Majhwar, Pandu	53	52	7	112 33%
OBC: Painika, Rajware, Yadav	32	29	7	68 20%
PTG: Pahari Korwa	25	23	4	52 15%
ST2: Gond, Kanwar, Kerwar, Oraon	46	48	7	101 30%
TOTAL:	158	156	26	340 100%

Table 4: Distribution of communities by village

Village	SC	ST1	OBC	PTG	ST2	Total
Dry land	0	24	5	13	13	55
Forest	3	48	2	0	1	54
Hill	0	26	26	39	20	111
Central	4	14	35	0	66	119
TOTAL:	7	112	68	52	100	339

Table 4 shows that we have around twice as many respondents in the better off villages, as compared with the poorer ones. This reflects the relative sizes of the villages themselves. While the communities are distributed across the villages, there are some differences between them. The

majority of ST2 respondents (66%) were in Central, the wealthiest village. The majority of PTG (75%) were in Hill. Forest is the most homogenous village, with the majority of inhabitants (89%) from ST1 communities. Table 5 shows how economic status varies by community.

Table 5: Community by Economic Factor

Community	Number of Respondents	Mean
SC: Ghasiya	5	-1.25
ST1: Agariya, Majhi, Majhwar, Pandu	94	-0.30
OBC: Painika, Rajware, Yadav	57	-0.18
PTG: Pahari Korwa	50	-0.16
ST2: Gond, Kanwar, Kerwar, Oraon	93	0.57
TOTAL:	299	.000

Figure 4: Graph showing Community by Economic Factor

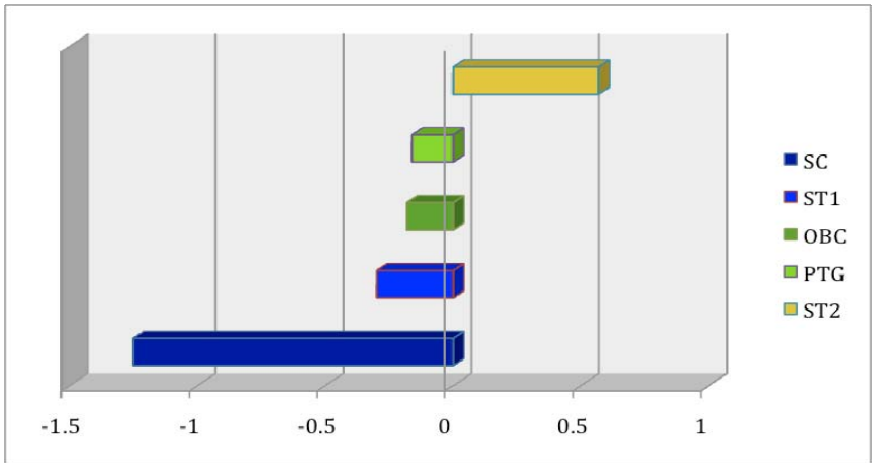


Table 5 and Figure 4 show that economically the communities divide three ways. The very small number of Scheduled Caste respondents are by far the poorest. The next three groups – the less well-off Scheduled Tribes (ST1), the Other Backward Castes (OBC), and the Particularly Vulnerable Tribal Group (PTG) – are all at a very similar economic level, although of course some individuals amongst them are considerably better off. The most well off group of Scheduled Tribes (ST2) are doing significantly better than all the other communities.

Reasons for this vary. For example the Kanwar (ST2) are the dominant group in the most prosperous of the villages we surveyed. The Oraon (ST2) are the group that have been Christian for the longest period, and are amongst the most educated of the Adivasi communities. They are the most likely to have secured jobs in local administrative and government posts having taken advantage of the government's reservation quotas.

We then conducted a one-way Analysis of Variance (ANOVA). This shows overall significance of community as a predictor of economic status. Post hoc tests show that this significance lies in the ST2 group being much better off than all the others (p=<0.001). There is marginal significance in

the difference between the SC group and the PTGs. The magnitude of difference in the scores in Table 5 and Figure 4, however, suggest that this failure to achieve significance is simply an artefact of the small number of SC respondents. The SCs are clearly extremely poor.

Religion

Looking at religion by community (Table 6 below), the highest proportion of Hindus is in the OBC category (66%). The 2001 census records Christians as making up 2.3% of the total population of India, and 'Christian tribes' as making up 4.7% of the population of Chhattisgarh. By comparison, there is a striking preponderance of Christians amongst the ST2s (21%). This is to a large extent due to the Oraon, many of whom, as mentioned above, have been Christians for several generations. The proportion of Christians is similarly high amongst the Scheduled Castes (two out of seven, or 29%).

Amongst the Adivasis, it is striking how practice of Sarna Dharm is inversely related to economic status, at 79% amongst the poorest (ST1) communities, 67% amongst the mid-range PTGs, and only 42% amongst the wealthier ST2 groups. Sarna Dharm is the traditional form of worship of the Adivasi communities, which is associated with sacred groves of sal trees. They have no figures of God, believing God to be formless ('niraakar') and inhering in nature. While Sarna Dharm is conventionally thought of as Adivasi religion, however, it is interesting to note that 71% of the SC respondents also followed it, and 31% of the OBCs. This is consistent with other studies in South Asia which have observed the tendency of apparently different religious traditions to merge into and borrow from one another, and the finding that locality has a major impact on forms of religious practice (e.g. Madan, 2004; Robinson, 2003; Flueckiger, 2006). However people classify themselves for surveys such as ours, they may in practice celebrate very similar festivals, and in rather similar ways, to neighbours who may identify themselves as belonging to a different tradition.

Table 6: Religion by community

Community	Sarna Dharm	Hindu	Christian	Total
SC: Ghasiya	5	0	2	7
	71%		29%	100%
ST1: Agariya, Majhi, Majhwar, Pandu	89	21	2	112
	79%	19%	2%	100%
OBC: Painika, Rajware, Yadav	21	44	2	67
	31%	66%	3%	100%
PTG: Pahari Korwa	35	16	1	52
	67%	31%	2%	100%
ST2: Gond, Kanwar, Kerwar, Oraon	42	38	21	101
	42%	38%	21%	100%
TOTAL:	192	119	28	339
	57%	35%	8%	100%

A very high proportion of couples come from the same community. No PTG woman is married to a non PTG man, and 22 couples are both PTG. There is one couple in which the husband is PTG and the wife ST1, but 48 ST1 couples in which both are from that community. Where the wife is ST2, one husband is ST1, but 44 couples are both ST2. The most variation comes within the SC category. Where wives are SC, one man is ST1; one ST2; two SC. All OBC women are married to OBC men. The community of husband is a significant predictor of the community of the wife, (p=<0.01).

With religion the picture is much more varied. Of 47 Hindu women, 33 are married to Hindu men, one to a Christian, and 13 to men who follow Sarna Dharm. Amongst 11 women who are Christian, nine are married to Christian men, and two to men who follow Sarna Dharm. Amongst 90 women who follow Sarna Dharm, 61 are married to men who share their religion, 27 to Hindu men, and two to Christians. Total numbers are given in Table 7.

Table 7: Religion by Gender/Marital Status

Religion	Married men	Married women	Single women	Total
Sarna Dharm	80 50%	96 62%	16 62%	192 57%
Hindu	66 41%	47 30%	6 23%	119 35%
Christian	12 7%	12 8%	4 15%	28 8%
TOTAL:	158 100%	155 100%	26 100%	339 100%

Conversion is a sign of social change. To become Hindu may signal upward mobility. It may also signal greater exposure to the outside world, which might explain why more men are Hindu than women, while more women follow Sarna Dharm.

Joining a sect or following a guru may also be a way of accomplishing a change in life or status. Looking at sect membership by gender/marital status, the following pattern was seen.

Table 8: Membership of sect/ follower of guru by gender/ marital status

Status	Married men	Married women	Single women	Total
Does not belong to or follow any sect/ guru	127	123	23	273
Belongs to or follows a sect/guru	31	31	3	65
TOTAL:	158	154	26	338

Thus around 20% of married people belonged to a sect or followed a guru. There was a strong association between husbands and wives (p= <0.01), with only 14 cases in which either a husband or wife belonged to a sect or followed a guru and the spouse did not. Only 13% of women heading households belonged to a sect or followed a guru.

We then considered whether there was any difference in the incidence of belonging to a sect or following a guru by community. The results are shown in Table 9.

Table 9: Membership of sect/follower of guru by community

Community	No guru/ sect	Yes guru/ sect	Total
SC: Ghasiya	7 100%	0	7 100%
ST1: Agariya, Majhi, Majhwar, Pandu	100 90%	11 10%	111 100%
OBC: Painika, Rajware, Yadav	30 44%	38 56%	68 100%
PTG: Pahari Korwa	50 96%	2 4%	52 100%
ST2: Gond, Kanwar, Kerwar, Oraon	86 86%	14 14%	100 100%
TOTAL:	273 81%	65 19%	338 100%

Table 9 shows considerable variation by community. Belonging to a sect or following a guru was especially common amongst the OBCs, at 56% of respondents in that community. It was least common amongst the PTG, with only one couple (4%) reporting that they did belong to a sect or follow a guru. ST1 and ST2 came in the middle, with 10% and 14% respectively.

Table 10: Membership of sect/follower of guru by religion

Religion	No guru/ sect	Yes guru/ sect	Total
Sarna Dharm	172	19 10%	191
Hindu	76	42 36%	118
Christian	25	3 11%	28
TOTAL:	273	64 19%	337

Looking at membership of sect or following a guru by religion, it was evident that this was much more common amongst Hindus. This may be simply that following particular forms of devotion is a feature of Hindu religion. Alternatively, it may also signify that people join sects and may convert to the majority religion as a means of signalling, or helping to achieve, a rise in social status.

Objective Wellbeing: How are people doing?

Demographic factors

The majority of marriages were monogamous first marriages (72%). As mentioned above, all single women had been married at some point, most (81%) had been widowed, the rest divorced. There were also a very small number of older single men living alone, but they were not included in our sample. Only four percent of marriages (seven cases) of our respondents involved one man with two wives. Of the women in polygamous marriages, four reported being first wives and three reported being second wives. Similar numbers of married men and women reported being previously divorced and now remarried (21 and 20 respectively), but a lower number of married women (six) reported being widowed and remarried than married men (11). Unlike some communities in India, there is no taboo against widow remarriage in this area. Table 11 sets out the type of marriage for married men, married women, and single women.

Table 11: Type of Marriage by Gender/Marital Status

Marital status	Married men	Married women	Single women	Total
Married (one wife)	119	125	n/a	244 72%
Married (more than one wife)	7	5 (+2**)	n/a	14 4%
Widowed	n/a	n/a	21	21 6%
Divorced	n/a	n/a	4	4 1%
Previously divorced now remarried	21	20	1***	42 12%
Previously widowed now remarried	11	6	n/a	17 5%
TOTAL:	158	156	26	340 101%*

* rounding error
** one remarried after divorce, one previously widowed now remarried, so counted there also.
*** formally still married but living separately from her husband (who is in a different village)

- ***Composition of Households***

The average household size was 5.5 for married couple households. This figure is derived from married women's data. For women-headed households the average is much lower, at 2.15 members.

The most common form of household is nuclear. There are 28 joint households. Of these, 25 contain a married couple and their son and daughter-in-law, 3 contain a married couple and their daughter and son-in-law. In 2 of the joint households, 2 brothers live together with their wives and their own parents. No single women have their parents with them.

There are stepsons in five households, and stepdaughters in four. There are nephews in four households and nieces in two. One male child worker is recorded, plus three other child kin, and two other child non-kin.

- ***Children***

Respondents reported up to nine children, with a mean of three. We also asked about the number of children who had died. Here the maximum was six, the mean 0.8. In all, 20% of children born to our respondents are no longer living today.

There is a marked imbalance in sex ratio in the children reported in households, with 219 sons (59%) and only 154 daughters (41%). This is consistent with another recent study in the locality (Rath, 2012). Figures on all children of respondents (i.e. including those who are grown up and now in other households) still show a bias towards boys, but this is much less marked (288 male children to 265 female children, 52:48%). Even this latter figure, however, gives only 92 females to every 100 males, which is considerably lower than the figures for Chhattisgarh state as a whole which at 991 females per 1000 males is one of the highest in India (2011 Census of India). Interestingly, figures for children who have died also show a son preference, with 79 boys recorded as having died and only 66 girls (women's data only). The imbalanced sex ratio is particularly surprising given the general view that son preference is less of an issue amongst Adivasi people than other groups in India, and clearly needs further research.

Table 12: Residence of children by category of child

Child type	Here	Away term time	Away all year	Own household	Total
Minor children	277 84%	35 11%	6 2%	12 4%	330
Children 18+	55 32%	0	2 1%	117 67%	174
Total	332	35	8	129	504

Based on reporting from women, the vast majority of children under 18 (84%) were living at home, and around one third (32%) of children aged 18 or over were also living in the household. Eleven percent of children under 18 were away from home in term time, with a further two percent away from home all year. This suggests that most absence from the home was due to schooling.

This is confirmed by the qualitative data, in which people talk about sending children to the mission school or other private schools which they believe will provide a higher quality of education than those available locally. For the Pahari Korwa there is also a government provided ashram in which children can stay for their schooling, although many of the children in Hill in fact come home at night, as the ashram is quite close. While only four percent of children under 18 had their own household, two thirds (67%) of children over 18 lived in their own households.

Education

Levels of formal schooling amongst our respondents were very low. They also varied significantly by gender, with men being considerably better educated than women, though still remaining at a low level overall. Table 13 sets out level of schooling passed by gender and marital status.

Table 13: Level of schooling respondents have passed by gender/ marital status

School level passed	Married men	Married women	Single Women	Total
None	43 27%	110 71%	21 81%	174 51%
Write own name only	43 27%	24 15%	5 19%	72 21%
Primary: Class 1-5	39 25%	13 8%	0	52 15%
Secondary: Class 6-10	27 17%	8 5%	0	35 10%
Higher Secondary: Class 11-12	5 3%	1 1%	0	6 2%
Tertiary	1 1%	0	0	1 0%
TOTAL:	158 100%	156 100%	26 100%	340 99%*

* = rounding error

Just over half of all respondents (51%) had no education at all, and a further 21% (72) could write their own name only. Thus almost three-quarters of respondents had not passed any formal education level.

Breaking this down by gender, 131 or 72% of women (married and single) had no education at all, as opposed to just 27% (43) married men. A total of 160 women (88%) had not passed any formal education level, as opposed to 86 men (54%). No single women had passed any level of formal education. This compares with reports of rural literacy rates for men as 68.78% and 47.57% for women in the Chhattisgarh Census 2011.

In terms of those who had passed formal education levels, there is a clear decline in the numbers of respondents passing as the levels of education increase. Again there is a clear difference between genders: seven percent of women had passed up to some level of primary education, as opposed to 25% of men; four percent of women had passed up to some level of secondary education, contrasted to 17% of men; and only one woman – 0.5% - had achieved higher secondary level, as opposed to three percent of men. Only one man had passed education at tertiary level.

The educational situation of respondents' children however is very different. Table 14 shows this, by age of child, using the data from women only to avoid double counting between husbands and wives.

Table 14: Education of respondents' offspring, by age

Age of offspring	None/ Own name	Primary	Secondary	Higher Sec.	Total
Four or under	27 90%	3 10%	0	0	30
Five to nine	13 19%	54 81%	0	0	67
Ten to fourteen	8 9%	49 58%	28 33%	0	85
Fifteen to nineteen	11 15%	10 14%	46 65%	4 6%	71
Twenty plus	63 44%	34 24%	41 29%	5 3%	143
TOTAL:	122 31%	150 38%	115 29%	9 2%	396 100%

Table 14 reports on a total of 396 children belonging to 182 women, an average of just over two per woman. This is lower than the figures on residency reported above (504 children), suggesting that not all respondents were ready or able to give information on their children's education. Also, the table does not tell us final levels of education achieved because some of the children are still at school.

These caveats notwithstanding, however, the table does indicate that levels of schooling are considerably higher for the children of our respondents than for the respondents themselves. Thirty-six percent of the offspring are over 20, and of these 44% are reported as having never gone to school or being able to write their own names only. Even this is a considerable increase on the levels of schooling reported by our respondents, for whom the comparable figure was 72%. The comparable figure for those aged five to nine is 19%, and ten to fourteen only nine percent. Sixty-five percent of fifteen to nineteen year olds have at least some years of secondary education, and a further six percent have some higher secondary. Eighty-one percent of five to nine year olds are or have been in primary school.

When we look at levels of schooling for respondents' children by gender, we can see some evidence of boys being favoured for schooling, particularly after the age of ten. 66% of children recorded as attending or having attended secondary school are boys. Part of this, however, could be due to the passage of time, with greater inequality in earlier times. The numbers of boys and girls under ten at primary school are comparable, and there are even more girls than boys aged 10-14 who are or have attended school (35 boys to 42 girls). However, within this group girls predominate at primary level, while boys at secondary.

Table 15: Education of respondents' children by age/ gender

Child's Age	Gender	None/ own name	Primary	Secondary	Higher secondary	Tertiary	Total
Four or under	M	14 88%	2 13%	0	0	0	16 101%*
	F	14 93%	1 7%	0	0	0	15 100%
Five to nine	M	7 20%	28 80%	0	0	0	35 100%
	F	6 19%	25 78%	1 3%	0	0	32 100%
Ten to fourteen	M	6 15%	20 49%	15 37%	0	0	41 101%*
	F	2 5%	29 66%	13 30%	0	0	44 101%*
Fifteen to nineteen	M	4 10%	2 5%	33 79%	3 7%	0	42 101%*
	F	7 24%	8 28%	13 45%	1 3%	0	29 100%
Twenty plus	M	22 31%	16 23%	29 41%	2 3%	2 3%	71 101%*
	F	41 57%	18 25%	12 17%	1 1%	0	72 100%

*Rounding error

Livelihoods

The main livelihood activities in this area are farming, daily casual labour (either through the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGA) or from private contractors), and the collection and sale of non-timber forest produce (NTFP). Table 16 shows how people listed the livelihood activities they had undertaken over the previous year (multiple answers were possible).

As the table shows, farming, daily labour and sale of forest products far outstrip all other activities, with virtually everyone (90% of our respondent population) involved in the first two, and most (75% of the population) involved in the third. Next comes artisan/craftwork, in which more men are involved, and then beer brewing, with a preponderance amongst married women. But the numbers involved in these are very small by comparison to the big three.

Table 16: Type of work undertaken in past 12 months by gender/ marital status

Type of work	Married men	Married women	Single women	Total
Farming	146	139	20	305
Daily labour	150	141	16	307
Sale of forest products	124	113	19	256
Artisan/craftwork	17	9	2	28
Business: beer brewing	6	17	2	25
Animal rearing	10	8	2	20
Pension	2	3	9	14
Service: government	4	8	0	12
Business: shop	5	6	0	11
Business: other	3	5	0	8
Service: private	4	1	0	5
Service: NGO	2	1	0	3
Remittance	0	1	0	1
Fishing	1	0	0	1
Other	16	9	2	27
TOTAL:	490	461	72	1023

When asked about their main source of livelihood over the past twelve months people overwhelmingly mentioned sale of forest products (91% of respondents). This figure, however, needs to be treated with some care. First, the survey coincided with a high point for collecting forest produce (mahua flowers and tendu leaves) and so this is likely to have been very prominent in people's minds. Second, people are able to sell forest products for cash (or in some cases, to government procurement agencies) so it may be that they see this as visible income, rather than farming for primarily their own consumption. Tendu leaves and sal seeds are also profitable products when collected in sufficient quantity. Such products are however not only significant sources of livelihood but also an important symbol of the relationship between the state and Adivasi communities. This rests on the fact that prices of some of these NTFP, e.g. tendu leaves, are decided by the state. Although this was ostensibly to ensure that Adivasi communities would not be exploited by private (non-Adivasi) trading communities, the state itself purchases produce at quite low rates and in effect has a monopoly on procurement. Some of these issues have been the source of Naxalite agitation in Chhattisgarh (Sundar, 2007). Table 17 shows the main forms of non-timber forest produce that respondents collect.

Table 17: Type of forest produce collected, by gender/ marital status

Type of produce	Married men	Married women	Single women	Total
Mahua	128	127	21	276
Tendu patta	104	87	15	206
Sal bij	141	127	17	285
Lakh/ doop	18	14	2	34
Medicinal plants	53	24	4	81
Firewood	158	152	22	332
Other	133	145	25	303
TOTAL:	735	676	106	1517

Overall, married men seem to be collecting more forest produce than women, particularly when it comes to medicinal plants. This latter point might reflect back to men's dominance within traditional healing roles. However, the differences are not great, and not too much weight should be laid on this. In addition, this table only shows the number of types of produce mentioned by respondents, not the amounts of produce gathered. The survey also contained a subjective question asking respondents how big an impact decline in forest resources would have on their lives. Analysis of responses showed no significant difference by gender/marital status, but marginal difference by economic factor, with poorer people stating that the impact would be greater for them.

A Wellbeing Ecology

The relationship of people to land, nature and cultivation suggests something about Adivasi understandings of wellbeing. This is a collective vision, in which people's caring for nature is a form of devotion, a necessary part of sustaining the cosmic balance. Each year there are collective rituals to ask forgiveness for wrong-doing and re-establish the proper harmony. Human action is part of a pattern of reciprocity: if people don't care for 'the garden' then God won't send rain.

Positions of status

Occupying special positions in the community, politics, or government service can be important not only in itself, but also for giving people privileged access to other kinds of material and non-material resources. A total of 129 married women (83%), 24 women household heads (92%) and 102 (65%) married men reported that they did not and had not occupied a special position. This shows that more men than women hold special positions within the respondents, and that single women are the least likely to hold such a position. Table 18 gives the breakdown in kinds of position held.

Table 18: Special positions occupied by self by gender/ marital status

Position held	Married men	Married women	Single women	TOTAL
Social/Community:				
Traditional healer (dewar, ojha, guniya)	11			11
Religious leader (procharik, baigah)	12			12
Village elder (seyan)	20	1		21
Village headman (patel)	2	1		3
Social/Community Total:	**45**	**2**		**47**
Formal Employment:				
CBO leader	6		1	7
Mitanin, Anganwadi assistant etc.		10		10
Anganwadi worker, ANM	1	5		6
Teacher	1			1
Formal Employment Total:	**8**	**15**	**1**	**24**
Formal Political:				
Panchayat/ ward member[10]	9	10	1	20
Sarpanch	2	1		3
Formal Political Total:	**11**	**11**	**1**	**23**
Other	9	4		13
TOTAL:	**73**	**32**	**2**	**107**

Looking at the different kinds of position that people hold, clear differences emerge by gender and marital status. Men predominate in the social/community hierarchy, occupying 45 of the 47 positions mentioned (96%). With respect to formal employment the gender balance goes the other way, with 16 women employed as against only eight men. However, ten of these women are in very low level positions, as mitanins (community health volunteer) or Anganwadi assistants. The only relatively high status job, a teacher, is occupied by a man. The most gender-equal arena is in formal politics. Here women and men are roughly equal, with a slight bias towards women in the figures on committee members (11 women to nine men) and to men in the senior role of sarpanch (two men to one woman).

[10] The panchayat is the lowest level of elected political body. If a village is very large it might govern only one village, but would usually spread across several since each panchayat represents the same specified number of people. The gram (village) committee or sabha refers to the registered (adult) voters within each village. They elect their representatives, the panchayat or ward members, to the panchayat. The ward/ panchayat members in turn elect the sarpanch. The sarpanch is the head of the panchayat and a very significant figure, as the person through whom all government schemes will tend to come to the village. Each block (sub-district) also has a panchayat samiti which is made up of all the sarpanchs of that block and acts as an intermediary between the panchayats and the district administration.

Overall, these figures suggest that activities of the state (public sector employment and setting the terms for local political structures) have had an equalizing effect by gender, although women are over-represented at the lower levels and men at the higher levels in both cases. By comparison, traditional social positions of authority remain overwhelmingly in male hands.

This is confirmed by our subjective data on voice at the village meeting. Asked about their opportunities to voice their opinions in the *gram sabha* (village meeting), married men tended to answer positively (mean of 3.44 out of 5). Married women were much more negative (mean of 1.75 out of 5). Interestingly, women household heads rated their opportunities to speak rather more highly than married women, though they were overall more negative than positive (mean of 2.50 out of 5). The most likely explanation is that when there is a man in the household it is he who will represent the household in village meetings. Additionally it could be that the greater average age of the single women, especially being past the menopause, might allow them slightly more voice.

Around half of respondents (179 or 53%) reported that no one in their close family occupied any of these special positions. In this case close family was taken to be any of the respondent's own extended family and the immediate family (parents-in-law; brothers or sisters-in-law) of their spouse.

Rice: consumption and production

These are communities where hunger has historically been common. However, the new availability of highly subsidized ration rice through the Public Distribution System (PDS) has made a major difference. It was something people voluntarily spoke about when we introduced the idea of wellbeing, and it was uppermost in people's minds when we asked about government services. Table 19 shows the number of months respondents say that they are still going hungry.

Table 19: Number of hungry months over previous year, by gender/ marital status

Hungry	Married men	Married women	Single women	Total
Not at all	151	147	25	323
One month	6	6	0	12
Two months	0	1	0	1
All year	0	2	1	3
TOTAL:	157	156	26	339

The vast majority of respondents reported not going hungry at all in the last year – 323 (95%) – which suggests that hunger is no longer much of a problem in this area. Of those who did report going hungry, for most it was for two or fewer months (13, or four percent of the total). However, there were three cases (one percent) – all women - where being hungry every month of the previous year was reported.

Even if the Public Distribution System (PDS) means that people are not going hungry, to be able to survive on one's own rice (even if in practice one eats the ration rice because it is cheap and sells one's own at a higher price) is a significant marker of wellbeing. Table 20 presents what people told us about the number of months they could eat from their own land in the previous year.

Table 20: Number of months in past year eating own-grown rice, by gender/marital status

Number of months	Married men	Married women	Single women	Total
None	4	3	3	10
1-3 months	37	46	9	92
4-6 months	50	42	2	94
7-9 months	25	15	3	43
10-12 months	35	40	4	79
TOTAL:	151	146	21	318

These figures are estimates, so not too much weight can be laid on them. In particular, the discrepancy between married men and married women is likely to be due to differences in estimation rather than real differences in amounts consumed by gender. The single women come out as clearly worse off, with 14% having had none of their own rice to eat in the previous year and 67% (14 cases) having four months or less. Only two percent of married respondents reported being unable to eat any of their own rice. While there are some differences between married men and women, these are as likely to be due to differences in estimates made as due to real differences in consumption. Overall, these figures present these communities as continuing to be in food deficit, unable to produce sufficient to cover their needs, which is consistent with the on-going dependence on the sale of forest produce and day labour noted above.

Figures for paddy harvested in the previous year vary widely, from a high of 9000kg to a low of nothing. Although the mean scores are very different for single women (319 kg) to married women (660 kg) or men (788 kg), the statistics show no significant difference by gender/marital status. This may well be due to the rather small numbers of women headed households. Correlation between paddy harvested and economic status is significant at $p < 0.01$ level. Table 21 shows the maximum and mean amounts of paddy harvested by community.

Table 21: Mean and maximum amounts of paddy harvested by community

Community	Paddy harvested, number of cases	Paddy harvested, maximum	Paddy harvested, in Kg (Mean)
SC: Ghasiya	5	90	27
ST1: Agariya, Majhi, Majhwar, Pandu	101	2100	349
OBC: Painika, Rajware, Yadav	63	2100	572
PTG: Pahari Korwa	52	3000	495
ST2: Gond, Kanwar, Kerwar, Oraon	97	9000	1282
OVERALL:	318	9000	696

A one way analysis of variance (ANOVA) shows that community is a significant predictor of difference in amounts of paddy harvested. Closer analysis through post hoc tests, however, shows that this significance is, like the economic factor, all about the difference between the ST2 and the other groups. As with the economic factor, the SCs are clearly doing very much worse than the others, but their small number means that this fails to make statistical significance.

Assets

When people were asked about their assets they were asked to respond as individuals. In practice, however, the figures given by married women and married men are virtually identical. This suggests that they were answering for the household rather than themselves. As a result, in this section we report data from (married and single) women only. Table 22 shows the assets our respondents hold.

Table 22: Assets held, as reported by married and single women

Asset	Married women (n= 156)	Percent of married women's households	Single women (n= 26)	Percent of single women's households
Radio	32	21%	2	8%
Latrine	51	33%	5	19%
Chickens	86	55%	11	42%
Goats	84	54%	11	42%
Cows	51	33%	7	27%
Plough oxen/ bullocks	125	80%	11	42%
Bicycle	94	60%	5	19%
Mobile phone	50	32%	2	8%
Motorbike	10	6%	0	0
Television	13	8%	0	0

The table shows clearly that women headed households have proportionately fewer assets of all kinds. They are closer to married households' holdings with respect to animals, other than plough oxen, and closest of all in the ownership of cows (27%, as against married women's reports of 33%). The differentials are greatest with respect to plough oxen and modes of transport and media/communication. Table 23 sets out the figures by community.

Table 23: Possession of assets by community group

Asset	SC	ST1	OBC	PTG	ST2	Total
Radio	3 (43%)	25 (22%)	5 (7%)	15 (29%)	18 (18%)	66 19%
Latrine	0	26 (23%)	24 (35%)	36 (69%)	18 (18%)	104 31%
Chickens	6 (86%)	66 (59%)	10 (15%)	41 (79%)	63 (62%)	186 55%
Goats	3 (43%)	58 (52%)	24 (35%)	39 (75%)	54 (53%)	178 52%
Cows	0	39 (35%)	31 (46%)	13 (25%)	32 (32%)	115 34%
Plough oxen/ bullocks	2 (29%)	82 (73%)	48 (71%)	43 (83%)	85 (84%)	260 76%
Bicycle	2 (29%)	59 (53%)	37 (54%)	22 (42%)	73 (72%)	193 57%
Mobile phone	1 (14%)	24 (21%)	19 (28%)	15 (29%)	42 (42%)	101 30%
Motorbike	0	1 (1%)	2 (0%)	0	14 (14%)	17 5%
Television	0	3 (3%)	8 (3%)	3 (6%)	12 (12%)	26 8%
Total Respondents in Community	7 (100%)	112 (100%)	68 (100%)	52 (100%)	101 (100%)	340 100%

Considered by community, differences are significant for latrine, chickens, goats, bikes, motorbikes (p's < .05) and marginally significant for cows (p's<.1). This would have been because many in our OBC category were Yadav households, who are traditional cowherds. No statistical significance is shown in differences by ownership of radio, plough oxen, mobile phones or TVs, although the figures show that ST2s have proportionately higher ownership of mobile phones and televisions.

As usual, the SCs come out as markedly lower in the possession of the significant assets. Perhaps the most striking figure is the Pahari Korwa's (PTG) 69% ownership of latrines, compared to only 18% amongst the wealthier ST2s and 25% amongst the other communities as a whole. The Pahari Korwas' ownership of latrines is also much higher than the state average of 27% of households with latrines, and even more so than the average for STs in the state overall, which stands at 18%. The ownership rate of the wealthier ST2 category is more in line with the average for STs overall.

Savings and Loans

Table 24: Savings by gender/ marital status

Amount of savings	Married women	Single women	Married men	Total
None	101	20	94	215
A little	52	6	62	120
A comfortable amount	2	0	2	4
TOTAL:	155	26	158	339

A majority of respondents reported having no savings or assets set by to draw on in hard times (64%), but this was particularly the case for single women (77%). Only one percent of respondents reported having a comfortable amount of money put aside. These figures suggest that many people in the respondent communities – and particularly single women – have little in the way of an individual or household safety net should they encounter unexpected hardships.

Table 25: Savings by community

Community	None	A little	A comfortable amount	Total
SC: Ghasiya	4 57%	3 43%	0	7 100%
ST1: Agariya, Majhi, Majhwar, Pandu	80 71%	32 29%	0	112 100%
OBC: Painika, Rajware, Yadav	51 76%	16 24%	1 1%	68 100%
PTG: Pahari Korwa	33 63%	19 37%	0	52
ST2: Gond, Kanwar, Kerwar, Oraon	47 47%	50 50%	3 3%	100
TOTAL:	215 63.4%	120 35.4%	4 1.2%	339 100%

Members of OBC communities were most likely to report having no savings or assets set aside for hard times, while ST2 members were least likely to have no resources allocated in this way. Indeed, ST2 had the highest reported incidence of having a little amount set aside and a comfortable amount set aside, only joined in the latter by one member of the OBCs. The patterns in saving by community are thus consistent with their relative economic status.

- ***Mortgages and Loans***

The number of respondents with land on mortgage is very high, at 83.1% overall. This is shown in Table 26.

Table 26: Land given on mortgage by community

Community	Mortgage	Number of respondents	Percent of respondents with land on mortgage
SC: Ghasiya	6	7	86%
ST1: Agariya, Majhi, Majhwar, Pandu	87	106	82%
OBC: Painika, Rajware, Yadav	52	67	78%
PTG: Pahari Korwa	39	51	77%
ST2: Gond, Kanwar, Kerwar, Oraon	91	100	91%
TOTAL:	275	331	83%

Those in the middle economically, the OBC and PTG, have the least land on mortgage. Somewhat surprisingly, having land given on mortgage is highest (91%) in the relatively well-off ST2 community. Qualitative information would be needed to explain why this is so. This apart, incidence of mortgage rises with poverty, as would be expected, since giving land on mortgage in rural communities is usually a sign of distress. In line with this, single women report having given land on mortgage more frequently (92%) than married women (83%) and married men (81%). It may also be due to single women finding it hard to cultivate directly due to taboos on women handling the plough.

- ***Other forms of loan***

As shown in Table 27 below, of those reporting that they had taken out a loan over the previous twelve months, the main sources were friends and family (55) and money lenders (77). Those were the only sources accessed by single women, perhaps suggesting that they lacked access to other sources of loan. More married men (47) reported borrowing money from money lenders than married women (28) and single women (two), perhaps suggesting that this avenue of credit was more readily available to men than women. Men were also more likely to get loans from banks (four of the six reported) and from employers (six of the eight reported). Only four percent of loans overall were taken from banks.

Table 27: Source of loans taken in the past year, by gender/ marital status

Source of loan	Married men	Married women	Single women	Total
Family and friends	26	25	4	55
Co-operative society	1	3	0	4
Money-lender	47	28	2	77
NGO/ Mahilamandal/ SHG	2	1	0	3
Employer	6	2	0	8
Bank	4	2	0	6
Kisan credit	2	1	0	3
Other	2	1	0	3
TOTAL:	90	63	6	159

Looked at by community (Table 28 below), borrowing is common across all groups, though proportionally highest (59%) amongst the OBC. For all except the two poorest communities, money lending was the most common source of loans. For SC members (one case) and ST1s, family and friends were the most frequent source of loan. Taken together, money lenders and family/friends were the most frequent sources of loans across all community groups.

Table 28: Source of loans taken in the past year by community group

Source of loan	SC	ST1	OBC	PTG	ST2	Total
Family and friends	1	20	8	8	18	55
Co-operative society	0	0	0	2	2	4
Money-lender	0	13	27	12	25	77
NGO/ Mahilamandal/ SHG	0	3	0	0	0	3
Employer	0	5	1	0	2	8
Bank	0	2	2	0	2	6
Kisan credit	0	0	2	0	1	3
Other	0	1	0	1	1	3
TOTAL (% of total in community):	1 14%	44 39%	40 59%	23 40%	51 50%	159 47%
TOTAL RESPONDENTS IN COMMUNITY	7	112	68	52	101	340

209 respondents reported that they did not take a loan out in the previous year. The proportions who stated this was because they did not need one, or could not get one, are shown in Table 29.

Table 29: Reasons for not taking loan

Community	Could not get loan	Did not try to get a loan	Total	Percent who could not get loan
SC: Ghasiya	4	2	6	67%
ST1: Agariya, Majhi, Majhwar, Pandu	21	54	75	28%
OBC: Painika, Rajware, Yadav	12	26	38	32%
PTG: Pahari Korwa	2	26	28	7%
ST2: Gond, Kanwar, Kerwar, Oraon	6	56	62	10%
TOTAL:	45	164	209	22%

A total of 78% reported they had not tried to take a loan, either because they did not need one, or because they had no confidence that they would be able to repay. There was little difference by gender/marital status among the 22% who reported that they had tried but could not get a loan. However there were some differences between community groups: while 93% of PTG and 90% of ST2 reported they had not taken a loan because they did not need one, only 33% of SC members reported this – thus 67% of SC members who did not take out a loan had not been able to get one, as opposed to not needing one. Thirty percent of the ST1s and OBCs also reported they had not been able to get a loan, as opposed to not needing one.

Health and Disability

When describing their own physical and mental condition, around half of respondents (48%) reported rarely or never experiencing conditions that gave them pain or trouble. Only 17% reported such conditions as always present, with around a third of respondents (34%) reporting that they sometimes experienced these.

While the figures for married men and married women are relatively consistent, there is a noticeable difference for women household heads: just under a third reported always having a physical or mental condition that gave them pain and trouble (31%) and a further 54% reported experiencing this sometimes. Only 15% of single women reported rarely or never experiencing such a condition. The most likely explanation for this is the older average age of the single women. It might also suggest some difficulties in accessing health care. Table 30 sets out the figures.

Table 30: Physical or mental conditions that give pain or trouble, by gender/ marital status

Experience pain/ trouble	Married men	Married women	Single women	Total
Always	26 17%	24 16%	8 31%	58 17%
Sometimes	46 30%	56 36%	14 54%	116 34%
Rarely or never	84 54%	75 48%	4 15%	163 48%
TOTAL:	156	155	26	337

We asked about disability in two ways. First, we asked using local terms for disability and for particular kinds of impairment, such as being blind or deaf. In addition, we asked if there was anyone in their household with a mental or physical condition that meant they were unable to work. This was based on our understanding that functional impairment is the basis on which people categorise disability in many contexts, following from the International Classification of Functioning, Disability and Health or ICF (WHO, 2001). This reasonably inclusive approach to disability may be one reason that the levels reported to us are rather higher than those that appear in the Indian census data of 2001, which recorded incidence of disability at 2.13% population. However, they are in line with the Government of India's estimate of disability in the Eleventh Five Year Plan of 5-6% and of other estimates which use more inclusive definitions, of 5-8% (Human Development Report 2011, Institute of Applied Manpower Research, p.235). Indeed, the World Health Survey of 2002-4, which gathered data based on the ICF definitions and framework, reported a disability prevalence rate of 24.9% for India (WHO/World Bank 2011: 273).

Table 31 presents the figures given to us by women, married and single, to avoid double counting between husbands and wives.

Table 31: Incidence of Disability reported by women, by household and household members

	Reported by Married Women		Reported by Single Women	
	Households	Household members	Households	Household members
Number of Cases of Disability	47	56	13	14
Total Number	156	851	26	56
Percentage of disability	30%	6.6%	50%	25%

The table shows the incidence of disability reported – 6.6% of members of married women's households. The number of households in particular is very high at 30% of married women's households and 50% of women headed households. In the much smaller and poorer households headed by women on their own, 25% of household members are disabled. It is also striking that a high number of reported cases of disability concern the respondent or their spouse: 30 cases or 64% in the case of married women's households, and 10 cases or 71% in the case of single women's households. The high incidence of disability in single women's households is due at least in part to their age, and physical difficulties that they experience in relation to this.

Table 32 presents the figures on health care providers that respondents had visited in the previous six months, broken down by gender/marital status.

Table 32: Health services visited in last six months, by gender/ marital status

Service visited	Married men	Married women	Single women	Total	Percent of Total
Spiritual/ traditional healer	25	23	3	51	17%
Mitanin	4	3	0	7	2%
ANM	0	0	0	0	
Quack Doctor[11]	67	73	15	155	50%
Primary Health Centre	20	12	2	34	11%
Block Community Health Centre	21	17	0	38	12%
District hospital	11	5	0	16	5%
Missionary hospital	2	5	0	7	2%
TOTAL:	150	138	20	308	100%

This shows that quack doctors were revealed as by far the most significant providers overall, at 50% of all cases. This is in part due to accessibility – the doctors come to the villages by motorbike, with a 'mobile clinic' in their panniers. The pattern was particularly pronounced for single women, for whom quack doctors accounted for 75% of all health seeking visits. Next most common were visits to spiritual or traditional healers (17% of total), and then primary health centre and block community health centre roughly equal at 11% and 12% respectively. Strikingly, no-one mentioned visiting an ANM. Roughly twice as many visits were made to the district hospital than to the missionary hospital.

[11] Quack doctors (this is a term commonly used locally) do not usually have any formal training, but have learnt their trade through apprenticeship, trial and error. They may mix allopathic with other kinds of remedies.

Table 33: Reason for most recent health care visit, by gender/ marital status

Reason for visit	Married men	Married women	Single women	Total	Percent of Total
Fever, cough, cold	42	51	6	99	32%
Reproductive health	12	13	1	26	8%
Malaria	43	41	7	91	30%
Cancer	6	5	0	11	4%
Broken bone	1	1	0	2	1%
Chronic conditions: diabetes, blood pressure, asthma, bronchitis, back or joint pain	20	5	4	29	9%
Possession	3	2	1	6	2%
Other	23	20	1	44	14%
TOTAL:	150	138	20	308	100%

Table 33 summarises the reasons for which people have sought health care in the previous six months. This shows that by far the most common complaints for which help is sought are fever, cough or cold (32%) and malaria (30%). There are no very obvious differences by gender, except for the preponderance of chronic conditions reported by married men. No respondents mentioned accessing services most recently for the reasons: acute (heart attack, stroke); teeth, TB; eye problems; mental health; mental disability.

Table 21 below shows that there is no strong pattern as to what kind of help is sought for what kind of health problem, except that the mitanin is only consulted for very minor matters, and only spiritual or traditional healers are sought for cases of possession. For two thirds of chronic complaints (20 of 29 cases) help was sought from either spiritual/traditional healers or quack doctors. People may of course seek help with the same condition from a number of health care providers, if they do not get better after the first form of treatment.

Table 34: Health Service accessed by most recent reason

Reason accessed	Spiritual/ traditional healer	Mitanin	Quack doctor	Primary health centre	Block Health Centre	District hospital	Mission hospital	Total
Fever, cough, cold	16	5	51	8	13	4	2	99
Reproduc-tive health	3		6	6	8	2	1	26
Malaria	5	2	63	9	7	4	1	91
Cancer	1		6	3		1		11
Broken bone	1		1					2
Chronic conditions	9		11	2	3	3	1	29
Possession	6							6
Other	10		18	6	7	2	1	44
TOTAL:	51	7	156	34	38	16	6	308

Recognising that people might not have been seeking health care for themselves, but for a family member or possibly a friend or neighbour, we asked for whom the most recent visit had been. Table 35 presents the responses. Table 35 suggests that respondents are most commonly reporting their own problems, and secondarily those of children. Married men were more likely to accompany their wives than the reverse. Respondents are least likely to report seeking health care for other kin outside their own household. No respondents reported the most recent problem relating to a non-kin non-household member.

Table 35: Who had most recent health problem by gender/ marital status

Who	Married men	Married women	Single women	Total
Self	76	77	15	168
Spouse	27	11	1	39
Child	39	36	2	77
Other household member	6	11	2	19
Other kin (outside own household)	2	3	0	5
TOTAL:	150	138	20	308

Table 36 gives the figures for child-focused visits to health care providers. This shows that they are disproportionately likely to visit the primary health care centre, and much less likely than adults to have a problem which takes them to a hospital.

Table 36: Where children are taken for health care

Service visited	Visits with Children	Total Visits	Child Visits as Percent of Total Visits
Spiritual/ traditional healer	11	51	22%
Mitanin (community health volunteer)	2	7	29%
Auxiliary Nurse Midwife (ANM)		0	
Quack Doctor	40	155	26%
Primary Health Centre	13	34	38%
Block Community Health Centre	9	38	24%
District hospital	1	16	6%
Mission hospital	1	7	14%
TOTAL:	77	308	25%

Access to Services

As mentioned above, PDS rice was at the top of people's minds when asked about government services.[12] Table 37shows the ration cards which our respondents held. The table shows that more than 80% of people had ration cards that allowed them to buy rice at Rs2 per kilo or less. A slightly higher proportion of single women were without a card than the population overall.

[12] There are six different schemes under which people had been issued ration cards. These were: 1. Annapurna- purple card (Government of India (GOI) Ministry of Rural Development- from 2001- for senior citizens not being covered by old age pension)- 10 kg free foodgrains per month; 2. Antyodaya- red card (GoI)- for poorest of poor families- 35 kgs of foodgrain at Rs. 3 per kg but in Chhattisgarh this is being provided at Rs. 1 per kg; 3. Below Poverty Level- yellow card (GoI)- Rs. 2/ kg; 4. Blue (slate coloured) State Chief Minister's Food Assistance Scheme CM FAS) for Adivasis not covered by BPL- Rs.2/ kg; 5. Saffron- CM FAS for non-Adivasis not covered by BPL- Rs. 2/kg; Above Poverty Level - White (GoI) Rs. 13/kg.

Table 37: Ration Card by Gender/marital status

Type of card	Married men	Married women	Single women	Total	Percent of Total
None	26	25	6	57	17%
Annapurna	2	0	0	2	1%
Antodaya	50	48	8	106	31%
BPL	11	8	3	22	6%
Slatey Rs2 CM FAS adivasi	57	62	8	127	37%
Saffron Rs2 CM FAS non Adivasi	8	9	1	18	5%
White APL	4	4	0	8	2%
TOTAL:	158	156	26	340	100%

There was an interesting divergence in perspectives on this intervention. People in our research villages were without exception positive about it. As one woman said: "Now we are getting rice from the government and so we are able to live our lives." Towards the end of our fieldwork, however, we held a seminar on our research in the State capital of Raipur, with an invited audience of academics, activists, government officers and media representatives. Their view on the subsidised rice was very different – that it rewarded laziness, removed incentives to work, and encouraged higher levels of alcohol abuse.

Asked if they were eligible for PDS rations, 97% of married men said yes, 99% of married women, and 100% of single women. Those who said that they were eligible for PDS were asked a follow up question as to whether they had access to PDS in practice. Table 38 shows their responses.

Table 38: Access to PDS amongst those eligible for it by gender/marital status

Access to PDS	Married men	Married women	Single women	Total
No	26 17%	24 16%	6 24%	56 17%
Yes	127 83%	130 84%	19 76%	276 83%
TOTAL:	153 100%	154 100%	25 100%	332 100%

Overall 83% of people eligible for PDS reported that they were receiving it. The proportion was slightly lower (76%) for single women than for married people. This is not coincidental. There were two major reasons that people reported to us for not being able to access PDS. The first was that after household break up one party would lose entitlement. The second was that single women were unable to represent themselves, or send someone else to represent them, in the village meeting, so failed to get registered for a ration card.

We then analysed the same data by community. Virtually everyone the SC, OBC and PTG groups stated that they were eligible, while four percent of ST1 and eight percent of ST2 said they were not. The figures for access to PDS amongst those eligible by community are given in Table 39.

Table 39: Access to PDS amongst those eligible for it by community

Community	Access No	Access Yes	Total	Percent with Access
SC: Ghasiya	3	4	7	57%
ST1: Agariya, Majhi, Majhwar, Pandu	23	86	109	79%
OBC: Painika, Rajware, Yadav	6	61	67	91%
PTG: Pahari Korwa	1	50	51	98%
ST2: Gond, Kanwar, Kerwar, Oraon	23	74	97	76%
TOTAL:	56	275	331	83%

This shows some interesting patterns. The PTG community reports the best access, at 98%, with the OBC next at 91%. The two ST groups, notwithstanding the economic difference between them, are reporting identical levels of access at 80%. The very poorest group, the SCs, has the worst access, at only 57%.

In terms of other government services, the Midday Meal (MDM) is given to school children, so only those with children at school are eligible for it. Amongst those who stated that they were eligible, virtually everyone said they were receiving it (97%) with no discernible differences by gender/marital status or community.

The Integrated Child Development Service (ICDS) is a government-sponsored programme to address health and nutrition problems in children under six and pregnant and nursing women. Half of our respondents stated that they were eligible for this, although only 12% of single women, probably reflecting their age and stage of life. Of those who were eligible, 94% of married people and all single women said that they had access to the ICDS. Considered by community, access was virtually universal for the SC, PTG and ST2. The ST1 and OBC reported slightly poorer access, at 92% and 85% respectively. Uptake overall was high at 91%, though slightly lower amongst the OBC (80%) and ST1 (86%) than other groups. What dissatisfaction there was centred on timing. This is presented in Table 40. Overall 79% said the ICDS was on time. There were, however, marked differences by community, with the OBC and PTG recording only 65% and 59% respectively as on time, compared with highs of 88% and 89% amongst the STs. This might be a village level effect, since both the OBCs and PTGs are relatively highly represented in Hill village.

Table 40: Timing of ICDS amongst those taking it up by community

Community	Not on Time	On Time	Total	Percent on Time
SC: Ghasiya	1	1	2	50%
ST1: Agariya, Majhi, Majhwar, Pandu	6	42	48	88%
OBC: Painika, Rajware, Yadav	7	13	20	65%
PTG: Pahari Korwa	12	17	29	59%
ST2: Gond, Kanwar, Kerwar, Oraon	5	42	47	89%
TOTAL:	49	275	324	79%

- ***Rural Employment Guarantee***

The Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS or NREGA) began in 2005 and guarantees up to 100 days of manual labour per rural household per year. Almost all respondents (97%) reported being eligible for NREGA, and 92% of those eligible reported that they had a job card. There were no discernible differences in levels of access between community groups. Eligible single women were however far less likely to have a job card (64%) than married women and men (both 94%). Of those with a job card, 71% had actually worked, though again women heading households were less likely to have taken up any work (38%) than married women (63%) and married men (82%). There were some differences by community: 66% of PTG, ST2 and SC had taken up work, and a slightly higher proportion of ST1 and OBC, both at 75%.

Of those taking up NREGA employment, 82% reported that work was available at an appropriate time. Ninety percent reported that the amount of pay was correct but there was some variance in this by community, ranging from SCs (four respondents) all reporting that they had received the right amount of pay through PTGs (97%), OBCs and ST2s (90%) to ST1s (85%). Overall women heading households show up as the group least satisfied with NREGA, being less likely to report access or take it up, and more likely to report that they had not received the right amount of pay. However, the numbers for single women are very small, with only six single women taking up NREGA employment, so it is difficult to know if their negative experiences indicate a more general pattern.

The most common complaint against NREGA concerned timing of payment. Only four percent stated that pay was available on time. Overall, therefore, our data suggest that NREGA is providing work at the right time and paying the right amount, but that there are serious issues about the timing of payment for the work.

Overall our data present a positive picture of the access of local people to their entitlements from the state. This is consistent with other studies that have documented how complementary actions from above - the political will of the Chief Minister of Chhattisgarh - and pressure from below – mobilisation through various kinds of people's organisations - have combined to turn a highly dysfunctional PDS system into one in which the majority are receiving the rice, food and employment which government policy states that they should have (Dreze and Khera, 2010). It is

important to bear in mind also that Chaupal, one of these people's organizations, was active in all the four villages we researched. We do not know if we would have found such high levels of access if we had undertaken surveys in villages where no such organization was working.

The Ambivalent State

The Forest Rights Act (2006) has been heralded as granting Adivasi people formal rights to the land on which they may have been living for generations. In the villages of our research, however, people were still in 2011 in the process of applying for their pattas (title deeds) within the framework of the Act. Of the 57 claims made from Hill village, 34 had been verified and the deeds granted, while about 14 had been refused and the rest were still being processed. Of the 14 that had been refused, this happened because their claim was for an area of land that was not at the specified location, already belonged to somebody else or was part of the common grazing land. People also said that at the time that the claims were made the administration did not make enough forms available- in fact there were only 56 forms available and that is why only 56 people could make claims for a patta. The village had been promised that more forms would be made available but so far this had not happened.

Mediators of Wellbeing

As stated above, the major objective of our research is to explore the relationships between poverty and wellbeing – both how poverty affects wellbeing and how people's inner wellbeing may make a difference to the ways they move into, within, or out of poverty. The research was designed with two rounds of data collection, one two years after the other, in order to incorporate a longitudinal element which would enable us to assess causal relationships between poverty and wellbeing. Since this report concerns only the first data round, we are not in a position to comment yet on these causal relationships. We are, however, able to point out a number of interesting and important correlations, and to point out which factors appear to be more significant in shaping wellbeing and which less so.

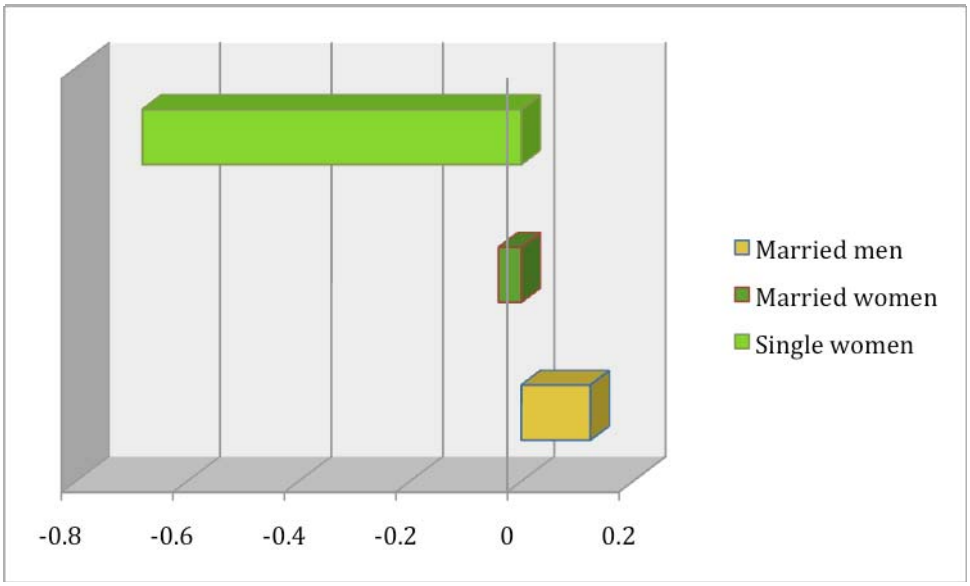
Figure 1 above depicted PADHI's model of wellbeing as being enabled or undermined by the broader environment and mediated by 'power, influence and identity'. In presenting the descriptive statistics above we have identified three key variables as potential mediators of wellbeing: the economic factor; gender/marital status; and community. In some cases one was more important and in others another, but in general all three variables did capture some degree of variability within respondents' experience. In this section we explore the extent to which these variables also serve as mediators of inner wellbeing.

We have already seen above that there are some significant economic differences between communities. The logic of selecting a mixed sample of married men, married women, and women living without a husband was to see if gender/marital status also makes a significant difference. Before proceeding to the inner wellbeing items, therefore, we report on tests we ran to see if gender/marital status predicts economic status. As before, we used our economic factor to produce standardised scores, which fixes the average as zero (see Appendix 1). These revealed married women to be doing slightly below average, single women well below average, and married men above. Table 41 presents the scores and Figure 5 plots these on a graph.

Table 41: Economic factor by gender/marital status

	N	Mean
Married men	144	.12
Married women	137	-.04
Single women	18	-.68
TOTAL:	299	.00

Figure 5: Standardised scores for economic status by gender/marital status



A one way analysis of variance (ANOVA) shows gender/marriage significantly predicts objective economic status (p=<0.01).

Post hoc tests of significance consider which comparisons are significant by looking at each pair in turn. These show that married men and women not scoring significantly differently from each other, but both are scoring significantly differently to women heading households (married women-single women p<0.05; married men-single women p<0.01). Some correlation between married men and women is expected, as they are reporting on the same household, though other factors (such as level of education) may differ between them. The pair-wise comparisons are shown in Table 42.

Table 42: Pair-wise comparisons of economic factor predicting gender/marital status

Gender/Marital status (A)	Gender/ Marital status (B)	Mean Difference (A-B)	Sig.
Married women	Single women	.61*	.016
	Married men	-.16	.281
Single Women	Married men	-.61*	.016
	Married women	-.77*	.001
Married Men	Married women	.16	.281
	Single women	.77*	.001

Thus the statistics do indicate some degree of difference by gender in economic status, with married men doing better than married women, but the major difference occurs when gender is combined with marital status, resulting in single women doing significantly worse than either married men or married women.

Subjective Reflections on Wellbeing

As outlined above, our survey contained two ways of capturing subjective reflections on wellbeing. The first lies in three final questions. These ask people to reflect on how they have been doing economically over the previous twelve months; to compare their standard of living now with five years ago; and a standard general happiness question: 'Taking all things together, how happy would you say you are these days?' Second, we have our own model of inner wellbeing. The statistical validation of the model is discussed elsewhere (Gaines et al. forthcoming). This supported both a seven factor model in line with our hypothesised domains and a single factor model, giving an overall measure of inner wellbeing.

We began by testing whether gender/marital status was a significant predictor for the final three subjective questions. We ran three ANOVAs separately, which were then joined together in Table 43 below.

Table 43: Gender/Marital status as predictors of subjective reports on economic wellbeing and general happiness

	F[13]	Sig.
How well doing this past year	.177	.838
How present standard of living compares with five years ago	5.483	.005
Global happiness	3.725	.025

[13] The F value is a measure of significance, from which the significance value (Sig.) is derived.

These showed married men, married women and women heading households differing on two of three items (compared to five years ago and global happiness). Post hoc tests told us more about which differences were significant. These showed that married men are scoring higher than single women on comparing with the past and how happy they feel now (*p*=<0.01). There is a marginal effect of married women over single women on comparing now with five years ago (*p*=<0.1). However, there are no significant differences concerning how people feel they are doing now.

We then considered community as predictor for these three items (Table 44)

Table 44: Community as predictor of subjective reports on economic wellbeing and general happiness

Independent Variable	Dependent Variable	F	Sig.
Community	How well doing this past year	4.611	.001
	How present standard of living compares with five years ago	5.319	.000
	Global happiness	1.364	.246

Overall, community predicts how respondents said they have done economically over the past year, and their standard living now compared to 5 years ago, but not overall happiness. Looked at more closely, ST2 doing better than ST1 is the one significant comparison for the first two questions.

Testing revealed that village had no effect on these three subjective wellbeing questions.

Finally, we investigated whether the economic factor would predict these three subjective questions (Table 45).

Table 45: Economic factor as predictor of subjective reports on economic wellbeing and general happiness

Dependent Variable	Independent Variable	B[14]	Sig.
How well doing this past year	Economic factor	.502	.000
How present standard of living compares with five years ago	Economic factor	.370	.000
Global happiness	Economic factor	.353	.000

The result was a strong positive, significant (*p*= <0.001) for all three subjective variables, and positive – those who are better off economically were also scoring more highly on the subjective questions.

We then considered what happens to significance when both economic and gender/marriage status are considered together.[15] Both the economic factor and gender/marriage are significant when

[14] The B value indicates whether correlation is positive or negative.
[15] The relatively small number of cases of women heading households makes it harder to find significance.

considered at the multivariate level. When looked at more closely, however, the economic remains significant at p= <0.01, but gender/marriage becomes less so (marginal). This is in part because the economic factor and gender/marriage are related to each other, as seen above. Also for gender/marriage the item showing as more significant shifts, so in this analysis 'how happy' has become non-significant, and 'how are you doing now' has become marginally significant, along with the comparison with five years ago (p = <0.1). Considering the post-hoc tests, once the economic factor is included, no gender/marriage difference is significant. There is only a marginally significant difference between married men and single women on compared with five years ago (p = <0.1). One explanation for this continued difference would be that at least some of the single women would have been married five years before and that losing their husband through either death or divorce might have had a negative impact on their economic status. Of the 24 single women for whom we have data on this, 11 said they had been on their own for five years or less.

Inner Wellbeing

Does the strong finding that economic status significantly and positively predicts subjective reflections on economic wellbeing and happiness also hold for our inner wellbeing domains? Are gender/marital status and/or community also or even more significant when it comes to these items? These are the questions which drive this section.

In what follows we discuss our inner wellbeing scores in three forms. Beginning from their format in the survey, we include some discussion on an item by item basis. Second, we discuss total scores for each of the domains. These were derived by adding up those items that factor analysis showed measured a given domain for both genders. Third, we also discuss a single inner wellbeing score. This was derived by conducting a factor analysis on the seven domain scores and extracting a single factor score from the domain correlations for each individual. We begin by discussing the domain scores and inner wellbeing single factor scores by our four potential mediators of wellbeing in turn: economic status; gender/marital status; village; and community. We then look at some individual item scores by our most robust mediators of wellbeing: economic status and gender/marital status.

- ***Economic status as predictor of inner wellbeing***

Table 46: Economic factor as predictor of inner wellbeing domain scores

Source	Dependent Variable	F	Sig.
Economic Factor	Economic resources	46.035	.000
	Agency and Participation	17.827	.000
	Social Connections	22.777	.000
	Close Relationships	6.839	.009
	Physical and mental health	27.364	.000
	Competence and Self-worth	45.487	.000
	Values and Meanings	43.233	.000

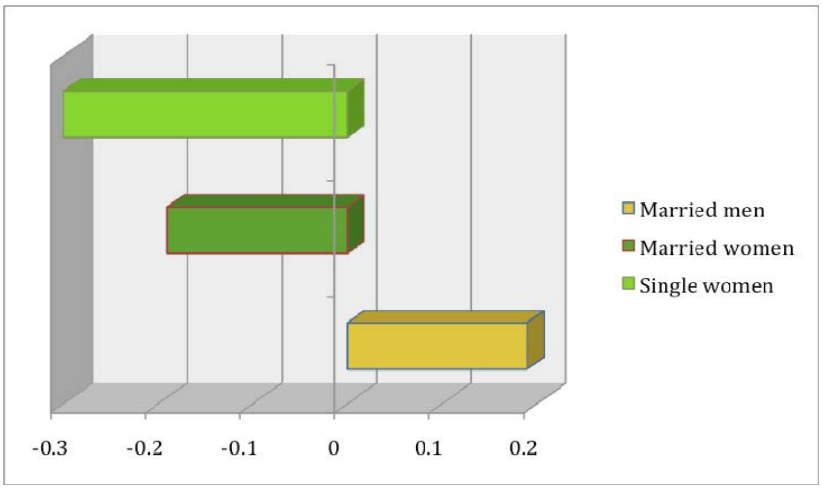
As Table 46 shows, the answer concerning the significance of economic status is a resounding yes! Economic factor predicts significantly and positively inner wellbeing total domain scores across six of the seven domains at *p*= <0.001, and the seventh at *p*=<0.01. The economic factor is also positively (.52) and significantly (*p*=<0.1) with inner wellbeing as a single factor.

- ***Gender/marital status as Predictor of Inner Wellbeing***

We then investigated whether gender/marital status is a significant predictor of inner wellbeing.

Considering inner wellbeing as a single factor, gender/marital status was shown to be a significant predictor, at *p*<0.01. In a pair-wise comparison it seemed that gender was making the most difference, since the significant difference was between married men and married women. However, as ever the small number of single women (in this case down to ten) needs to be taken into account. Figure 6 shows this in graph form.

Figure 6: Inner Wellbeing Index by Gender/Marital Status



We then considered how gender/marital status affected inner wellbeing scores across the different domains (Table 47).

Table 47: Gender/marital status as predictor of inner wellbeing domain scores

Source	Dependent Variable	F	Sig.
Gender/marital status	Economic resources	.171	.843
	Agency and Participation	20.937	.000
	Social Connections	18.872	.000
	Close Relationships	.679	.508
	Physical and mental health	5.517	.004
	Competence and Self-worth	.196	.822
	Values and Meaning	7.559	.001

Table 47 shows that gender/marital status is a significant predictor of inner wellbeing in 4 of the 7 domains: agency and participation; social connections; physical and mental health; and values and meaning. This effect remains even when the economic factor is introduced as a competing variable. Specifically, gender/marriage significantly predicts agency (married men > married women), social connections (married men > married women and married men > single women), physical and mental health (married men > single women), and values and meaning (married men > married women).

A note on these findings is perhaps in order. It is common for studies of subjective wellbeing to note that married people generally report themselves as happier and more satisfied with their lives than single people do. This is generally interpreted in quite a simple way to be evidence that marriage is good for you. We cannot comment here on situations in other contexts. In the context of these villages in northern Chhattisgarh, however, the fact that women living on their own report lower levels of inner wellbeing cannot be abstracted from the patriarchal structure of their communities. This exposes women living without a husband to multiple hazards, including a degree of social exclusion, economic hardship, political marginality, gossip and sexual predation.

What is perhaps most surprising is that gender/marital status is not a predictor of the close relationships inner wellbeing domain. We are not sure how robust this finding is – it needs to be tested further in the second round. Close relationships was the domain with which we had least confidence in the accuracy of our respondents' answers. Means were extremely high (4.63, beside an average across the other domains of 2.97). It might be that this reflects the excellent quality of family relationships amongst our respondents, but casual observation and community meeting discussion about, for example, domestic violence, suggests that this may not be the case.

There seemed to be two major difficulties with this domain. First, it was one of those which people are not used to discussing in such direct terms. We thus struggled to devise appropriate questions. To give an example, during grounding and piloting we were trying to ask a woman about how much care she felt she was given with in her family. She responded in three ways. First, she said she always worries about her husband going to another village and that he will drink there and maybe fall down and what will happen to him. If her husband was at home then she would have cooked for him and fed him and known where he was safe at home, but if he is out then she worries about him and can't sleep. Second, she said she was married in front of several people. Finally – and in some exasperation with us – she said surely he loves her since they have been living together so long and have had five children together.

The other difficult aspect with this domain is that it seemed governed by particularly powerful norms which resulted in a strong positivity bias – whatever they really felt, family unity was what should be projected. The result of both these issues is that we need to hold rather lightly our results from this domain at present. We are testing out some additional and alternative items, and plan to introduce at least some of these for the second round of fieldwork.

- ***Village as Predictor of Inner Wellbeing***

We then considered whether village had an effect on inner wellbeing scores (Table 48).

Table 48: Village as predictor of inner wellbeing domain scores

Source	Dependent Variable	Sig. of village when economic factor included	Sig. (village alone)
Village	Economic resources	.394	.042
	Agency and Participation	.005	.008
	Social Connections	.004	.030
	Close Relationships	.533	.524
	Physical and mental health	.086	.013
	Competence and Self-worth	.117	.932
	Values and Meaning	.065	.005

At first sight village was a significant predictor for five of the seven domains. However, when the economic factor is included in the analysis, the significance of village is reduced (the economic domain is no longer significant or marginal; health and values are now marginal). When the economic factor is included with village, village continues to be a significant predictor of inner wellbeing only for the two more political domains – agency and participation, and social connections. In the agency and participation domain, the main difference was between Central and the other villages - with the most significant difference being, surprisingly, with Hill and the least with Dry Land. With social connections the degree of significance was slightly stronger but the pattern was the same. Village was not a significant predictor of wellbeing as a single factor.

Table 49: Pairwise comparisons of village with two inner wellbeing domains

Domain	Village (A)	Village (B)	Mean Difference (A-B)	Significance
Agency/ participation	Central	Forest	-.504	.092
		Hill	-.442	.011
		Dry Land	-.439	.105
Social Connections	Central	Forest	-.469	.023
		Hill	-.325	.019
		Dry Land	-.343	.100

- ***Community as Predictor of Inner Wellbeing***

We then tested for community as predictor of inner wellbeing. Overall, community does not predict inner wellbeing, whether we measure it as 7 domains or as a single index. The only exception is that for the economic resources domain, the effect is significant - in particular, the best off community, the ST2 feel themselves to be doing significantly better than do the next to poorest group, the ST1. It must be recognized, of course, that in these Adivasi villages differences between communities are much less marked than in parts of India where caste is a major factor. It is particularly important, therefore, not to generalize this finding to India as a whole.

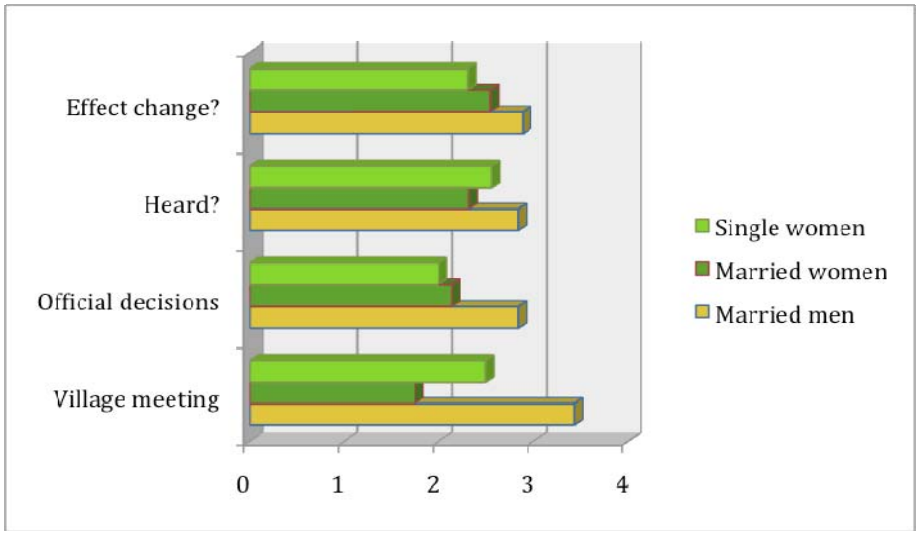
- ***Inner Wellbeing at the Item Level***

We also explored the predictive value of gender/marital status and the economic factor on our inner wellbeing domains item by item. This is obviously too much detail to go into here. However, in this section we highlight a selection of particularly strong or surprising findings.

For the economic resources domain, multivariate tests showed the economic factor was a significant predictor of the inner wellbeing items. Gender/marriage was not. However, it is important to note that the number of single women is very low (12) due to non-response on some items, so this affects our ability to pick up significance. Looking at all items by economic factor, all scores were in the expected direction (better off objectively corresponding to better off subjectively). Pairwise comparisons showed that gender/marriage has virtually no effect across the four items within this domain. There is only a hint for first item, ('How well would you say you are able to live at present?') which has married women scoring marginally higher than married men (p=<0.1).

The domain where gender/marital status made the greatest difference was agency and participation. Figure 7 presents the mean item scores by gender/marriage.

Figure 7: Mean item scores Agency and Participation domain by Gender/marital Status



When both the economic factor and gender/marital status were considered together, both showed as significant for the first three items in the domain ('If there is a village meeting do you have an opportunity to voice your opinion?'; 'If official decisions are made that affect you badly, do you feel that you have power to change them?', 'Do you feel that you are heard?'). Both variables were highly significant on the first item (village meeting at p = <0.01) and the same high level of significance was achieved for gender/marital status on the second item (official decisions). The other items that were significant were so at p =<0.05. Gender/marital status was marginally significant for the final item ('How confident are you that along with others you will be able to bring change to your community?') at p= <0.1 and the economic factor was non-significant for this item.

Within the social connections domain, most of the significant effects of gender/marital status were in the expected direction. An exception was the fourth item in the domain - 'Do you feel there are people beyond your immediate family who you'll be able to count on even through bad times?' Single women scored highest on this – significantly higher than married women, and marginally higher than married men. This may have been in part because at least some of the single women who were interviewed were living in their natal rather than marital villages. Their connections with their community members were therefore likely to have been quite strong on account of their being immediate kin.

Some of the challenges of the close relationship domain are discussed above. There is one further factor that is interesting to note. We included one item that aimed to get at the negative side of having close family relationships, the demands of others that these lay you open to. The item was 'How often is it that your family requires you to do things that you don't want?' Perhaps unsurprisingly, single women scored significantly more highly than married women on this (p=<0.05). This was the only pairwise comparison in which gender/marital status made a significant difference, though there was a marginal difference with married men scoring more highly than single women on the fourth item ('How much do people in your house care for you?').

There were no particularly striking findings in the physical and mental health domain. The first item showed married men were sleeping significantly better than single women and marginally than married women. The second item, which asked people how fit and healthy they felt they were compared to other people of their age, had married women scoring lower than married men, and single women scoring marginally lower than married men. Item 4, which asked about time to rest and relax, showed single women scoring marginally higher than married men and married women.

For competence and self-worth, the economic factor predicts positively and significantly three of the four items, gender/marital status none of them. For values and meaning all items were predicted positively and significantly by the economic factor. Married women were marginally more positive about the place they are able to make for religion in their lives than were married men. When it came to harm from witchcraft or the evil gaze, however, married women scored worst, reporting themselves as significantly more fearful than married men, and marginally more fearful than single women.

Conclusion

The big story is that these are extremely poor communities in which change can be seen to be taking place in a positive direction, significantly because of action by the state, complemented by political mobilization from below, which has enabled people to monitor implementation and press for the rights to which policies say they are entitled. The importance of this political context cannot be over-stated. It is a strong reminder that wellbeing cannot be adequately understood by looking at the individual level only, but is critically affected by politics and policy.

This notwithstanding, since colonial times the state has proved a capricious patron for communities such as these, providing alternately protection, marginalization, opportunities for advancement, and exposure to exploitation. The way that it at once grants and withholds titles to forest land, described above in the case of Hill village, gives an example of how this ambivalence is on-going.

Without exception people locally stated that what we have termed the 'enabling environment' was becoming more supportive, particularly due to the PDS rice. Asked about the prospects for their children's future, however, respondents were still cautious. Shared memories of difficult times are still strong. Beyond this, they seemed to suggest that while the conditions existed for their children to make better lives for themselves, it would depend on individual action as to whether they could realise these in practice. Alcohol abuse was seen as a particular issue in this respect.

In terms of the factors mediating wellbeing, people's objective economic status has by far the greatest effect. It is strongly inter-related with the other mediating factors of gender/marital status, community and village and has strong predictive power of levels of inner wellbeing across all domains. This is consistent with other studies which have argued that the economic is a powerful predictor of people's subjective wellbeing where people are living in poverty. However, initial analysis of qualitative data suggests that the way the relationship between economic status and inner wellbeing is seen in communities such as these may be a rather more interior and integral one than the relationship of independent to dependent variables which the literature assumes. This is a matter that requires more investigation through qualitative methods.

Next to the economic factor, gender/marital status seemed to be the variable with the greatest predictive power for levels of inner wellbeing. It significantly predicts the inner wellbeing single factor index, and four of the seven wellbeing domains. Location also makes a difference, with five domains showing significance, although only two of those (agency and participation, and values and meaning) at the strongest (p=<0.01) level. This effect is reduced when the economic factor is included, so that location makes a significant difference for only agency and participation and social connections. This having been said, the experience of being in the villages is that they are quite different from one another, more different than the statistics suggest. This needs to be followed up further with both more statistical analysis and more qualitative work.

Perhaps most surprisingly, given the importance of community to the sociology and politics of India, community did not show up as a significant predictor for inner wellbeing. There were, however, some significant differences by community in terms of how they are doing in objective terms. Again, more qualitative analysis is needed to explore the different ways of being in community that are not fully captured by the use of categories, and how this differs between the villages. In

addition, it should be noted that in these villages differences by community were not so strongly marked as they are in some places in India. It might well be, therefore, that similar research in another location would find community to be a much more important mediating factor.

While objective economic status is without doubt important, it does not explain all the variance between our respondents. There are many other issues that need to be taken into account. In the findings reported here, this is especially evident at the item level, where other mediating variables may be more important than the economic factor.

The findings support the value of having a seven domain model, rather than reducing inner wellbeing to a single item index. With the seven domains it is possible to explore and explain a much wider range of variability between respondents and so to tease out where an explanation that relies on economics alone may fall short.

Finally, we need to recognise the limitations of what is presented here. In the first place, it is only a draft report of initial analysis. There is, however, a more substantial point. We have attempted to be sensitive to the local context, and believe that we have gone further than most in seeking to reflect what is important to people locally and their ways of seeing things in the process of our research. Nonetheless, however, we have to recognise that this methodological approach carries a very strong 'disciplining' effect, requiring our respondents to express themselves in ways that do not come naturally. This can only ever be part of the picture. Our brief reference above to the importance of human-environment ecological reciprocity in Adivasi understandings of wellbeing gives a hint of this. In order to be able to explore something of the depth and richness of what wellbeing may mean for people themselves there is no substitute for in-depth, qualitative encounter.

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APPENDIX A: Generating the asset index and economic index

Asset Index

The asset index was generated by weighting the ten asset items as follows:

Radio: No = 0, Yes = 1
Latrine: No = 0, Yes = 2
Chickens: No = 0, Yes = 1
Goats: No = 0, Yes = 2
Cows: No =0, Yes = 3
Bullocks: No =0, Yes = 3
Bicycle: No = 0, Yes = 2
Mobile phone: No = 0, Yes = 2
Motorbike: No = 0, Yes = 4
Television: No = 0, Yes = 3

These weighted items were then entered into a principal axis factor analysis, in which one standardised factor was extracted. The resulting factor score for each individual was taken as the asset index.

Economic Index

For each gender, the economic index was created via a principal axis factor analysis of the following items, with one standardized factor extracted and the resulting factor score for each person taken as the economic index:

Education
Main living
Secondary living
Paddy
Months eating paddy harvested by self
Months going hungry (reverse-coded)
Savings
Land given on mortgage
Assets (index)

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