INNOCENTI WORKING PAPERS

No. 97

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United Nations Children's Fund
Innocenti Research Centre
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Innocenti Working Paper
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Social Protection in the Informal Economy: Home Based Women Workers and Outsourced Manufacturing in Asia

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– December 2002 –

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Acknowledgements
Earlier versions of this paper were presented at UNICEF's International Conference on Home Based Work by Women and Children in Asia, Bangkok, 6-8 December, 2001, and the conference on Child Labour in South Asia, Jawaharlal Nehru University, New Delhi, 15-17 October 2001. We are grateful to A. Giommi, L. Guarcello, P. D. Falorsi, S. Falorsi, B. Meyers, J. Micklewright, R. Srivastava, M. Suhrcke, and F. Volpi for comments. Thanks also to C. Vizcaino for her excellent research support. We acknowledge with gratitude the help of S. Mariani in getting the database in order. Without the assistance of Yvette Verna this project would have taken much longer to complete; we are deeply indebted for her support.

Cover design: Miller, Craig and Cocking, Oxfordshire – UK
Printed on recycled paper by: Tipografia Giuntina, Florence, Italy
Layout and phototypsetting: Bernard & Co., Siena, Italy
ISSN: 1014-7837

Readers citing this document are asked to use the following form of words:

Mehrotra, Santosh and Mario Biggeri (2002), "Social Protection in the Informal Economy: Home Based Women Workers and Outsourced Manufacturing in Asia". Innocenti Working Paper No. 97. Florence, UNICEF Innocenti Research Centre.

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Abstract

There has been an increasing informalisation of the labour force in developing countries over the past few decades. Simultaneously there has been a feminisation of the labour force. One aspect of this dual phenomena is the growth of subcontracted home based work in both manufacturing as well as services, and to some extent in agriculture. This paper draws on surveys carried out in five Asian countries – two low-income (India, Pakistan) and three middle-income countries (Indonesia, Thailand, Philippines) – where home based work is widespread. Home based work has a dual and contradictory character: on the one hand, as a source of income diversification for poor workers and the emergence of micro-enterprises, and on the other, the source of exploitation of vulnerable workers as firms attempt to contain costs. This paper examines the social protection needs of these women workers, and also argues for public action to promote such work as a possible new labour-intensive growth strategy in these and other developing countries. A companion paper examines the phenomenon of child labour in home based work in the same countries (Working Paper 96, see page 84).

One of the most understudied areas in informal sector activities in developing countries is that of home based manufacturing activities.[1] Homeworkers are not counted in the GNP of most countries (in the case of own-account workers) – much as in many informal economic activities. The scarcity of good data is both a cause and consequence of this invisible status and such activities are not covered in conventional labour force survey methods. There has been very little analysis or even acknowledgement of the contribution made by home based work (hbw) to family and national incomes. In addition, there is scant effort made, and almost no data, to distinguish children from adults in home based work, to understand the impact of this type of work on women's life and health and on children's health and schooling. Finally, there is the necessity to examine from a gender perspective the constraints as well as the opportunities arising from such income generating activities.

More attention has been given these issues in the 1990s. The ILO Con-

1 One should note that home work has been widely practised in industrialized countries going back to the industrial revolution. Home work in garment, textile and artificial flower production industries cannot be separated from that revolution. Home work survived largely due to the low wages paid to male workers in factories, the reserve army of labour available in agriculture, and the lack of alternative work for women. Home work was undertaken largely by poor, married women with children, who could thus support the family income. Around 1900, criticisms of such work began, and finally prevailed among trade unions, since it was argued that they reduced employment for men in factories, weakened their bargaining position and detracted from women's domestic responsibilities. See Boris and Prugl (1996) and Prugl (1999) for an interesting discussion.

ventions on Home based Work (1996) and on the Worst Forms of Child Labour (1999) provide the background to the need for our research on this issue. The ILO Convention on Homework (1996) defines homework as "work carried out by a person i.) In his or her home or in other premises of his or her own choice, other than the workplace of the employer; ii.) For remuneration; iii.) Which results in a product or service as specified by the employer, irrespective of who provides the equipment, materials or other inputs used…" (ILO, 1996).

Despite the scarcity and low estimates of official data, small-scale studies over the past decade have documented the scope of hbw. It is estimated that there are 250 million home based workers, including 200 million from the poorest families (WIEGO, 2000). In Indonesia, one household in three is estimated to be involved in hbw; China's estimate is 20 million; Vietnam, one in three households; India, 30 million workers (8-10 in the bidi industry, 4-5 million in incense sticks, and 8-10 million in weaving – the three sectors we examine) (Homenet, 1999).[2] In fact, in India, the 55th Round of the National Sample Survey (July 1999-June 2000) – which was the first-ever nation-wide survey on informal sector non-agricultural enterprises – showed that the total number of informal workers in non-agricultural enterprises is 79.7 million, of which 30 million are home based (Sudarshan et al, 2001). The vast majority of these home workers are women. This is the result of a dual phenomena: the simultaneously increasing informalisation and feminisation of the labour force in developing countries. Although part of the informal activities, home based workers are involved, especially in South and South East Asia, in the internationalisation of production and thus included in the global value chains (McCormick and Schmitz 2002). Responding to increasing international competition, firms use homeworkers to externalise production and minimise risk in order to cut costs.

The fact that the existence of the problem is being recognised is shown by the fact that two of the countries selected for our study – India and Thailand – have had national surveys with representative samples which have tried to survey home based work (both in 1999). The Philippines also had a survey, in 1993, of home based workers, but not based on a national sample.

UNICEF (Innocenti Research Centre, Florence) conceived, designed and commissioned five country studies of subcontracted home based work – mostly in manufacturing – in five Asian countries (Sudarshan et al., 2001; Khan et al., 2001; Oey-Gardiner et al., 2001; Amara et al., 2001; Rosario et al., 2001). Three countries were middle-income, South East Asian – Indonesia, Philippines and Thailand – and two were low-income, South Asian ones – India and Pakistan. This paper is based on an analysis of data

2 In Thailand (Homenet) 38 per cent of clothing industry workers are home workers.

Table 1: *Surveys on hbw in five Asian countries: sectors, location, number of FGDs and households surveyed*

	LOCATION	Number of FGD*			Households Surveyed			Urban		Rural	
		Total	Urban	Rural	Total	HBW	CG	HBW	CG	HBW	CG
INDIA											
Incense stick making	Bangalore District, Karnataka	2	1	1	201	153	48	78	23	75	25
Bidi (MP+TN)	MP+TN	5	2	3	201	151	50	91	25	60	25
Bidi (MP)	Indore District, Madhya Pradesh	3	2	1	101	76	25	76	25	_	_
Bidi (TN)	North Arcot Ambedkar District, Tamil Nadu	2	_	2	100	75	25	15	_	60	25
Zardosi	Lucknow District, Uttar Pradesh	2	1	1	201	148	53	58	12	90	41
Sub-Total		*9*	*4*	*5*	*603*	*452*	*151*	*227*	*60*	*225*	*91*
PAKISTAN											
Incense stick making	Orangi, Unit 12C, Karachi	2	2	_	99	77	22	77	22	_	_
Carpet weaving	Korangi Town, Karachi	2	2	_	99	77	22	77	22	_	_
Sack stitching	Godhra, Karachi	2	2	_	100	75	25	75	25	_	_
Prawn peeling	Machar Colony (Mohammadi Col.), Karachi	2	2	_	99	74	25	74	25	_	_
Sub-Total		*8*	*8*	_	*397*	*303*	*94*	*303*	*94*	_	_
INDONESIA											
Pottery	Purwakarta, Plered/Sukatani Distr., West Java	2	_	2	100	70	30	63	7	7	23
Rattan	Cirebon, Weru District, West Java	2	_	2	100	70	30	70	30	_	_
Batik	Pekalongan, Wiradesa/Tirta Distr., Central Java	2	_	2	100	70	30	30	14	40	16
Sub-Total		*6*	_	*6*	*300*	*210*	*90*	*163*	*51*	*47*	*39*
PHILIPPINES											
Home décor	Rizal Prov., Luzon	3	2	1	45	36	9	36	9	_	_
Metalcraft	Kalayaan in Angono, Rizal Prov., Luzon	_	_	_	_	6	_	_	_	_	_
christmas lights	San Vincente in Angono, Rizal Prov., Luzon	_	_	_	_	20	_	_	_	_	_
christmas balls	San Vincente in Angono, Rizal Prov., Luzon	_	_	_	_	10	_	_	_	_	_
Pyrotechnics	Sta. Maria, Bulacan, Luzon	3	_	3	44	35	9	_	_	35	9
Okra	Sierra, Concepcion, Tarlac province, Luzon	2	_	2	43	34	9	_	_	34	9
Fashion accessories	San Roque, Talisay, Cebu Province, Visayas	2	2	_	41	30	11	30	11		
Sub-Total		*10*	*4*	*6*	*173*	*135*	*38*	*66*	*20*	*69*	*18*
THAILAND											
Paper products	Photho Distr., Prov. Angthong, Central, Song Distr., Phrae Prov., Northern	2	_	2	132	102	30	_	_	102	30
Leather Crafts	Ratburana Distr., Bangkok Prov., Central, Samrong Distr., Samutprakarn Prov., Central	2	_	2	136	102	34	98	28	4	6
Hybrid seeds production	Sakon Nakhon and Kalasin prov., Northeast	3	_	3	131	101	30	_	_	101	30
Sub-Total		*7*	_	*7*	*399*	*305*	*94*	*98*	*28*	*207*	*66*
TOTAL		40	16	24	1872	1405	467	857	253	548	214

Notes: - indicates that data were not collected in the survey or data collected were not comparable. FGD = Focus Group Discussion, HBW = Home Based Worker, CG = Control Group or Non-hbw household, * Considering separately one for women and one for children, MP= Madhya Pradesh, TN= Tamil Nadu
Source: UNICEF survey.

collected – through household surveys, focus group discussions and case studies – conducted over late 2000-early 2001 (Table 1). The objective of the studies was to examine the work and the condition of women in home based economic activities in informal manufacturing and child labour in these activities.

One of the main outcomes of the research is the dual character of subcontracted home based work. This dual character is contradictory. On the one hand, hbw is an important source of income for the home worker households. This aspect underlines the central role of these earning activities in the welfare of the households. On the other hand, there are poor conditions of work and related health issues, the low rates of pay (which often keep the households close to poverty-line), and the vulnerability of the households especially if home based work is the main source of income. Furthermore, home based workers are invisible, non-unionised and the lack of collective action can make them very vulnerable totally lacking social protection. Ignoring their existence and the perspectives of such workers by focussing social protection on the formal sector was one of the mistakes of previous policy makers. The magnitude of home based work and the degree of exploitation of these workers call out for much greater public intervention and collective action to improve home based work in terms of occupational health and safety, and child labour, as well as households capabilities, in order to interrupt the inter-generational transfer of poverty.

The aim of this paper is twofold. The first is to analyse the characteristics of home workers and, in particular, conditions of women as home workers. The second is to propose policy to improve social protection and to increase the income of home based households. Section 1 begins with some theoretical considerations. In the first part, it examines the factors influencing the human development (HD) level of any household (including those in hbw), and changes in the HD level of household members, as well as the role of synergies which can impact that level through public action. It also discusses why these theoretical considerations are important in understanding the dynamic of inter-generational transfer of human capabilities in poor households engaged in the informal economy. In the second part, it focuses on the characteristics of home based income generating activities from a dynamic point of view, examining their potential for development into micro-enterprises and small and medium enterprises as a possible path for human development. Section 2 examines some characteristics of the informal sector in Asia, and of subcontracted home based work within it. Section 3 presents the methodology adopted in the study of home based work in the five countries in Asia. Section 4 profiles the sectors and the households selected for the survey. Section 5 examines the phenomenon of subcontracting as a growing link between the formal and informal sectors in the five countries; it also discusses the relationship of home based workers to the sub-

contractors, apart from the value chain and the price mark-ups in the sectors selected. Section 6 analyses the main economic and demographic features of the home worker households: the house, which is also the place of work, and its characteristics such as ownership of house, durable goods, and the basic services available. Section 7 is devoted to gender issues since we think that the women, who represent the majority of home based workers, can be agents for enhancing the human development of the household. In particular, this section focuses on the main features of home based work, on the conditions of work, on their problems and priorities and on their participation in collective action. A sub–section is devoted to health issues and econometric estimates are used to understand the factors influencing the health status of women workers. Another round of econometric estimates section is devoted to estimating the factors which may improve the home workers' incomes. Section 8 reviews the initiatives by the government of selected countries in Asia to address the problems of home based workers. The final section draws some policy implications from the preceding analysis on how HD outcomes for home workers can be improved through public and collective action.

1. Factors Influencing the Human Development of HBW Households: Some Theoretical Considerations

▪ 1.1 *The role of synergies in human development*

The human development level of a household (HDhh) has two main dimensions which are strongly related to each other. One, in terms of human endowments (HE) or human capital (education, health), and two, in terms of economic endowments (EE), such as the ownership of assets and/or the capability to improve well-being through income generating activities. Without external intervention (collective and/or public action) a poor household may remain at best in a status quo of human capabilities and there will be an inter-generational transfer of a poverty trap (for a detailed analysis see the companion paper Mehrotra and Biggeri, 2002). A household needs interventions – public policy and collective action – for improving HE and EE. In particular, the synergy between the two sets of interventions can significantly enhance human capabilities and promote economic growth (Taylor et al., 1997). The first synergy is between interventions within the basic social services (bss) – basic education, basic health, water and sanitation, and nutrition. But these synergies are a sub-set of a second set of synergies, between interventions aimed at human capital formation (which is the outcome of access to, and utilisation of basic social services), income-poverty reduction and economic growth.

As a theoretical construct this notion of the dual synergies builds upon

some recent literature.[3] The intellectual antecedents of our dual synergy construct can also be found in the capability approach, especially its emphasis on women's agency – particularly in the version now associated with the work of Amartya Sen and Martha Nussbaum. With Sen and Nussbaum, we strongly believe that women's agency is critical to triggering the first set of synergies.

At the household level the impact of this first synergy can be demonstrated by examining the life-cycle of an educated girl. There is evidence that an educated girl is likely to marry later than a girl who remains without any education – this is especially true if the girl's education extends to at least junior secondary level and she engages in economic activity outside the home. Independent research has also established that an educated girl will have fewer children, will seek medical attention sooner for herself and her children, and is likely to provide better care and nutrition for herself and her children – thereby reducing the probability of morbidity through disease and hence survival of her children beyond the age of 5. Over time, the survival of her children will change the behavioural pattern of the family in respect of fertility and contraception thus lowering the overall fertility rate.

The second synergy is between income increase, its better dispersal, and health and education outcomes connected to provision of basic social services.[4] However, a continuous improvement in health and education indicators may be unachievable in the absence of income growth, just as sustained growth would be impossible without at least a minimally educated and healthy workforce. At the macro-economic level, then, it becomes critical to promote economic growth of the kind which improves the income distribution in favour of

3 As a theoretical construct this notion of the dual synergies needs to be distinguished from some antecedents along similar lines in the development economics literature. First, the synergy notion has to be distinguished from the concept of linear stages of development which was characteristic of the writings of Rostow (1960). Instead we propose that development proceeds along cyclical stages. The cycles can be characterised by simultaneous progression along desired outcomes of human capital formation, income-poverty reduction and economic growth, or cycles in the opposite direction. In fact, development patterns of countries can be understood by locating countries along these three axes of desirable outcomes (Taylor et al, 1997). Second, it builds upon Rosenstein-Rodan's (1959) theory of the 'big push', of simultaneous public interventions in a number of critical sectors. Third, the notion of the second synergy is built upon more recent theoretical and empirical literature, which has demonstrated the benefits for growth of low levels of income inequality. Fourth, our notion of synergies is conceptually close to the dynamic, which is intrinsic to Marx's dialectics (without necessarily implying any corresponding notion of historical stages). Fifth, our theoretical construct also draws strongly upon the literature of the last two decades, which emphasises the positive externalities in interventions in health, education and family planning. Our main criticism of the notion of externalities is that it does not capture fully the feedback effects from human development outcomes back to social service inputs, and the virtuous cycle from inputs to outcomes in an upward spiral.

4 Note that the first synergy is really a sub-set of the second synergy, but it is critical to distinguish between the two conceptually, since in reality, the first set of synergies can be set in motion without necessarily the second set of synergies actually being in place. However, in the long run, there is a strong risk of the first set of synergies 'running out of steam' in the absence of the second set of synergies.

the poorest. This is the essence of the second synergy – the interaction among income-poverty, social development, and economic growth.

Both synergies can be found at macro and micro level. For the second synergy, economic growth promotes human development only if the poor benefit from it; if the poor benefit, it would put into motion a virtuous circle of growth and equity. Therefore, in order to implement the second synergy (and reduce child labour), a real increase in the income of the poor is a necessary condition.

For reducing poverty (and child labour) the quality of growth matters. The growth of per capita income is no guarantee of human development. From this follows that policies – to be relevant for poverty and child labour reduction – have to promote the participation of poor households and thus involve the sectors where the income of the poor comes from. In other words, the policies have to focus also on the informal sector (and within that the hbw sub-sector) – since the vast majority of the poor are engaged in informal activities (especially, but not only, if one includes those self-employed in agriculture). In any case, the fact that most of the labour force is in the informal sector has clear implications for the quality of economic growth. In other words, if governments are blind to the pattern of growth in terms of the nature of products produced in the informal sector, the commercial procedures employed (e.g. subcontracting) or the technologies employed therein, they risk repeating the mistakes of the past in relation to industrial and trade policies in respect of formal industry. In most developing countries, inappropriate products and inappropriate technologies have entrenched a situation wherein formal sector manufacturing output has grown, but manufacturing employment has not grown commensurately (Stewart, 1974). This has contributed either to a worsening of the distribution of income, or at least stagnation in terms of pre-existing absolute poverty levels.

However, the experience of East Asia (Japan, Korea, Taiwan) has demonstrated that where there is a more equal distribution of income to start with, income inequality may actually decline with economic growth – thus setting in motion synergy two. Two aspects of income distribution need to be favourable for accumulation: the functional distribution (i.e. between shares of total income accruing to the factors of production) for physical capital formation and household distribution for human capital formation. A major reason for the low inequality in the household distribution in these countries was the unusually even distribution of wealth, especially land. A second reason was the investment made in education for all in the early years of development. A third reason is the presence of a relatively important and vibrant small-scale business sector, which has been the engine of employment and reduced overall income inequality. The difference in Japan, Korea and Taiwan is accounted for by institutional mechanisms and policies, which facilitate this translation of profits into savings and investment.[5]

Almost all countries today have some policies for small and medium enterprises, since they are seen as engines of job creation. However, Japan, Korea and Taiwan made particular efforts to support smaller and medium enterprises, (SMEs), while at the same time supporting large firms using capital-intensive techniques.[6] Taiwan has vigorously promoted small-scale industries, through establishment of industrial parks and districts with financial and technical support, as well as agriculture and rural industries. Since 1978 China has adopted a similar strategy, with outcomes characterised by remarkable growth and poverty reduction.[7]

This paper suggests that this strategy may need to be supplemented now

5 For a discussion of these mechanisms and policies, see Yoon and You, 1995.

6 It should be noted, of course, that the protection of the small-holder agriculture and small businesses in general in these economies would be considered by neo-liberals to be market-distorting. Korea protects the small-holder farms, not only by trade protection but by restricting the size of individual farms, banning absentee ownership and numerous other measures i.e. in addition to the initial conditions of equality in assets created by land reform.

7 There is empirical evidence from China over the last decades that public action can trigger the two sets of synergies, thus successfully reducing poverty and child labour. Since the reforms started in 1978, the number of people under the poverty line fell from 250 million (almost all rural dwellers lacking adequate food and clothing) to 37 million (34 million of which are in rural areas) in 1999. In the same period the child labour (10 to 14 years old) incidence fell from 30.5% in 1980 to 8.6% in 1999. The reduction of poverty and child labour were attained mainly in the early 1980s when the rural reforms became the cornerstone of the whole development strategy. Agriculture became - together with the rural Small and Medium Enterprises or Township and Village Enterprises (TVEs) - the leading sector of Chinese socio-economic development and economic growth (Biggeri et al, 1999). There were three main reasons for this success. The first reason was the initial condition of the Chinese social system. At the end of the 1970s, although the economy was stagnant and despite the well known and dramatic mistakes during the Maoist period, the socio-economic bases for long term development were laid and all the elements for the first synergy were present. Indeed, this included basic industry and general infrastructure, but also improved irrigation schemes and extension services in agriculture. Health care and education systems were accessible and affordable (especially in rural areas) to all citizens. The second reason was the reforms implemented and the institutional changes which brought with them a gradual transition to the socialist market system. The institutional changes gave the right incentives at both levels - micro (household level) and macro level (through decentralisation) - and promoted rapid economic growth. The last reason was the reforms in rural areas: the strategy of growth was targeted to sectors which were the income source of mass of the poor i.e. agriculture and the non-farm activities. The bottom-up reforms which created the household responsibility system (and the dis-aggregation of the Commune system) were fundamental to Chinese farmer incentives and welfare improvement. In China, land is still collectively owned, "all villagers are entitled to a plot of land, unless they have another source of fixed income". Although contrary to "privatisation mode", maintaining the right to land use was the most important way of preserving farmers' entitlements and it remains for rural dwellers an important safety net. The increase of non-farm activities facilitated structural changes by absorbing labour surplus and reducing migration, and helped the peasant household to diversify household income and become "consumers". Indeed, a boom of rural enterprises was also a part of the story with the initial involvement of local government. In the Township and Village Enterprise sector between 1980 and 1989 around 64 million new jobs were generated. In other words, the Chinese socio-economic success is strongly related to the two synergies at work which brought economic growth and human development since the 1980s. The policies implemented were pro-poor in that they were labour absorbing and involved the sectors where their incomes came from.

in the rest of Asia – South East as well as South Asia – with a 'SME plus micro-enterprises' strategy. The latter would take into account the changed realities of these economies since the East Asian trio (Japan, Korea, Taiwan) managed their transition. In most developing countries, employment in manufacturing has grown more slowly than output. The employment elasticity of manufacturing in developing countries has been consistently low. This was less the case in South East Asia (Indonesia, Thailand, Philippines) than in South Asia, since the former adopted a strategy reliant more upon the exports of labour-intensive manufactures. Without explicitly incorporating micro-enterprises, including the chain of contracting under which a significant share of manufacturing currently takes place in the emergent market economies of Asia, a mere SME-oriented strategy may fail in the changed environment faced by these countries.

▪ 1.2 *Home based work: a driver of poverty, or a trigger of human development?*

Home based work, as mentioned in the introduction, presents a dual character. On the one hand, it may trigger an increase in income and hence the capabilities of the household. On the other hand, it may become a constraint to human development as it leads to child labour and keeps children from school. For this reason there is a need for a two-pronged intervention: on the one hand to promote production and productivity in order to increase income and on the other, to provide basic social services and social protection. The two sided intervention will be reinforced by the two synergies described in the previous section.

On the positive side, home based work offers several advantages to families. Above all, it offers employment and hence an opportunity to enhance and diversify their income; it also saves workers travel time and they can do other activities in addition to home based work. For men, other such activities usually include another economic activity (e.g. farming in rural areas or periodic wage work), and for women it normally implies the performance of their reproductive and domestic role. Home workers can gain specific skills in producing goods at home, increasing the human capital available at household level and at local level. The work and the experience can eventually trigger the entrepreneurial capabilities of some workers/subcontractors and the home based activities can be the start up of a small enterprise. These aspects are relevant from a theoretical point of view and we will come back to this issue later in this section.

Subcontracting is often beneficial to the local and national economy as well and offers the prospects of strengthening inter-industry linkages; enhancing the entrepreneurial skills of subcontractors; taking industry to rural areas; increasing industrial competitiveness; spreading technology down to less skilled workers; and generating employment. It also favours networking and

institutional changes. There are several reasons why subcontracting is practiced in manufacturing, and why it may be growing in most countries.[8]

Subcontracting by firms to home based workers offers employers several advantages. First, firms can recruit from a much larger area than would be the case if hiring was limited to areas which are within commuting distance. Second, they can hire workers in accordance with variations in demand. Third, they minimise the risk of unionization. Circumventing safety nets, labour rights and safety in the work place all help employers to save costs. A characteristic of home workers is their 'isolation' and the lack of information. Work done by home-workers may also be less costly to the employers, since costs such as rent, power, water, tools, and so on, are the responsibility of the workers, not the employers. Finally, part of the entrepreneurial risk is passed to home based workers.

These advantages can mask severe disadvantages for the home worker. In conditions of excess supply of labour, piece-rates (the normal form of payment in hbw) can be low, and thus home workers' share in the value chains extremely low. In many cases piece-rates are low despite the fact that home workers, in some cases, are very highly skilled. Work conditions can be very exploitative especially if there are few alternative income earning opportunities in the area or if work is available only as bonded labour. The exploitation of the home workers by local employers is just a first step in exploitation through the global value chain. The problem for home workers arises from their low market access and their lack of contact with the final consumer. The lack of unionization can also be an important source of the vulnerability of home workers' families; it is an issue we discuss later. Furthermore, the activities are often dangerous in terms of health in first place for home workers, and in the second instance, since the activity is done in the home, for other household dwellers. Children are often engaged in hbw activities to respond to low price per piece and in order to generate additional income for the household. This implies that many children do not go to school, while others, such as part time workers, register negative effects on educational attainment (see Mehrotra and Biggeri, 2002).

In terms of social protection, workers in the informal sector tend to be by far the most vulnerable. Poverty is a static concept, while vulnerability is a dynamic one. Vulnerability – the probability that a shock will result in a decline in well-being – is largely a function of a household's asset endowment (physical and human capital, which we discussed above) and insurance mechanisms. The lack of insurance mechanisms can have serious consequences for income growth at household, hence at a macro level. Thus, if children are seen as a substitute for old-age security, measures to provide a pension after retirement, and some form of social security in the interim, would greatly reduce the

8 For India, a UNIFEM study (2000) suggests that subcontracting has been on the increase since the late 1970s. It notes that it was not significant around 1970, but from 1978 it became widespread among large factories with a share of 21 per cent.

perceived benefit stream from additional children. The logic here is similar to the effect of improved and affordable health services on the survival chances of children. If child mortality were to fall on account of more effective health services, the long-term effect on fertility decline would have similar benefits in terms of economic growth as social security/old age pensions would. The combined effect of social security and health expenditures would cause a behaviour change comparable to that experienced by the now industrialized countries in the one hundred years between 1850 and 1950.[9] That behaviour change underlay the demographic transition in Europe and North America over the same period. We return to this issue of social protection in both the empirical analysis and policy implications in later sections.

On one side, home workers can be seen as a potential labour force for larger enterprises, but on the other side home based income generating activities can be considered as seeds which may evolve into small enterprises. Although hbw includes different types of low value-added activities (ranging from skilled to non-skilled) many hbw households and subcontractors can be the embryo of a micro-enterprise and thus foster the development of a local area through proliferation of small enterprises on an on-going basis. The home workers' human capital is going to influence local production capabilities through SME clusters. A cluster is constituted by many SMEs producing the same type of products in a specific geographical location; there can be more than one cluster in the same area producing different product groups.

In hbw, as for SMEs, there is a sort of natural clustering. The hbw households in the same type of products are often concentrated in a specific geographical location. Clustering is a natural strategy to reduce transaction costs and to capture positive externalities and synergies. Indeed, home workers are 'naturally' clustered because intermediaries and employers need to reduce the transaction costs connected to subcontracting, throughout the input and raw material distribution, the output collection, the contract enforcement and the dissemination of information (when no other means of communication is available). Moreover, specialisation in one type of product improves the skills and the productivity of the local labour force.

As the cluster develops, small and medium enterprises develop with them. This development has a number of positive externalities, which push the process forward. The positive externalities are generated in the local system through super-specialisation of enterprises and workers, specialisation in services linked to the production process, capital goods production linked to products produced in the cluster, equipment sharing, and so on.

9 Cigno and Rosati (1992) find that more than three-fourths of the fertility decline in Italy between 1930 and 1985 can be attributed to the extension of pension coverage. They also find a close relationship between the two variables in Germany, UK and USA (Cigno and Rosati, 1996). For similar evidence for developing countries, see Chernichovsky (1982), Nugent and Gillaspy (1983), Entwisle and Winegarden (1984) and Jensen (1990).

In a cluster, the skills acquired by workers and the specialisation of enterprises in a phase of the production process are important for the economic success of a local economic system.[10] Clustering of SMEs facilitates and is facilitated by collective actions at enterprise level with the formation of producer associations. Collective action at the local level – through associations – can focus the attention of the central government on the cluster in terms of social, trade and industrial policies.

However, in the nets of clustering are also captured negative externalities. Hbw is often dangerous in terms of family health. Home based workers are generally subject to poor environmental conditions, sometimes hazardous occupations or processes, poor lighting and ventilation, non-availability of safety devices, exposure to toxic substances, dangerous gases, postural and spinal disorders, and so on – as many of the studies find. These phenomena damage the health and environment given the concentration of activities, and as a result the 'invisible' hbw activity in the location becomes visible.

Clustering – according to Small and Medium Enterprise Theory (SME Theory) – is one of the conditions to develop a local system of small and medium enterprises.[11] Collective efficiency is a term coined to identify the results of the key relationship among small and medium enterprises, a relationship of co-operation and competition (Schmitz, 1995).

As the SME theory emphasises, the development of a local system through SMEs needs not only collective action, but also the support of local and central governments. The local policy makers' intervention is fundamental to up-grading the human capital and infrastructure which are external to a single enterprise. The fact is that these crucial factors are under-supplied by the enterprises since the single enterprise tends to under-invest, for instance, in managerial, administrative and marketing skills and in employees' skill improvement and training. The labour force in the area can move from one enterprise to another and infrastructure can be used by everyone. What is an external factor for the enterprise is an internal factor for the local collectivity and for economic development. Without public and collective action the development through SMEs is limited (Becattini, 1990) and the second synergy cannot work properly. For instance, a credit system can trigger innovation

10 Marshall (1920) discussed the relevance of clusters of micro, small and medium size enterprises in the industrialization process of a country. Three economic concepts underlying this process of industrialization (parallel to the medium-large size enterprises) are the effects of externalities, joint actions and of economies of scale in the local system of production. Clusters can evolve into more complex structures. Development of industrial districts is one possible evolution of a cluster (Becattini, 1990; Brusco, 1990).

11 As the literature suggests, a cluster of enterprises can have different starting points (UNCTAD 1994; Nadvi and Schmitz, 1999; Mead and Liedholm, 1998). Clusters often arise spontaneously, and are connected to lower transaction costs. For instance a cluster can be generated by an agglomeration of traditional artisan activities in a specific sector and location, or by the presence of a larger enterprise which subcontracts part of the production stages to smaller enterprises. Institutions, trust, networks, local demand, traditional skills, but also foreign demand are key factors that influence the type of clustering.

in equipment and thus productivity. We believe that to improve the home workers' household conditions and, at the same time, to develop hbw activities, similar public interventions are needed.

SME theory on clustering indicates that a local system can have two paths of development: a low road or a high road (Pyke 1992; Pyke, Becattini and Senberger, 1990). The low road is positive but not dynamic, due to the limited interaction and specialisation (especially vertical) among enterprises in the local system. In the low road there is limited action by local government, there are few institutional changes and little co-operation among enterprises. In the high road different actors of the local system co-operate and compete for the efficiency of the system, and for its innovative and competitive evolution. There is an involvement of associations of producers, associations of labourers, of higher educational institutions and local governments.

Thus, in rural and urban Italy, home based household activities played an active role in local development,[12] and in many parts of the country small activities were able to take the high road.[13]

An aspect to keep in mind is that although the local system acquires skills in one type of product, it can eventually switch to other sectors which require similar skills. The key to the high road to development of a local system is the continuous upgrading of human capital, and the triggering of institutional arrangements and networks at local level, as well as the capability to undertake collective action for the socio-economic development of the area.

A third category, that we may call a 'dirt road', is perhaps currently in existence in many developing countries.[14] This is the case of a cluster that involves hbw without giving the workers any social protection (as in the case of countries under study in this paper). The development of hbw clusters is connected

12 In some areas small manufacturing enterprises and home based workers related to them led to the emergence of industrial clusters, and in a few cases, due to the right institutional and non–institutional conditions, these matured into industrial districts of small and medium enterprises which contributed to the 'Italian Miracle'. The areas are together called the 'Third Italy' i.e. not the north, where large industries are concentrated, and not the south, which is predominantly agricultural. 'Third Italy' is characterised by a large number of clusters – mainly in north-east Italy (Veneto) and central Italy (Emilia-Romagna, Toscana, Marche, Umbria).

13 For instance, consider the case of Carpi, a famous knitwear industrial district in Italy. The roots of its development lie in the skills acquired by home based workers in the sector of straw weaving. The small entrepreneurs used the middleman to enlarge production by subcontracting to the home workers. The evolution of institutional arrangements, and of the network created, was a key to the local development of Carpi. The local government helped. For instance, at the end of the 19th century the municipality of Carpi approved that in kindergarten and elementary schools, in addition to regular education, the teachers were required to produce goods woven with straw. In that period, part time child labour was the norm. In the case of Carpi, after the end of the Second World War, the demand for straw weaving goods suddenly declined. The entrepreneurs were able to switch to knitwear, thanks to the skills of home based workers. Gradually, the home workers become employees (or entrepreneurs) in small and medium enterprises, benefiting from social protection (Cigognetti and Pezzini, 1994).

14 However, in many developing countries (e.g. China, and as we see discussed below, parts of East Asia) the high road has also been followed. On China, see Biggeri (2000).

to the growing phenomena of subcontracting in a national and/or international value chain. This is often the lowest way, a way in which the workers ('reserve army of labour', in a Marxian sense) are at the lowest level of social protection accompanied by exploitation.

Ideally, a cluster of hbw households can evolve into a cluster with micro-enterprises and small enterprises at household level that compete, but also co-operate with each other. For instance, often there is a potential for upward mobility: of the home-workers into becoming subcontractors, and subcontractors evolving into entrepreneurs. Given their role in social reproduction, it is less likely that women would be able to graduate into subcontractors but at least the male household members engaged in home based work could. The possibility to evolve from this 'dirt road' to the low road exists, but without joint action (collective actions, by the exploited workers in their collective interest) and the support of public intervention this evolution is almost impossible.

Therefore, although the development of part of the industrial system through SMEs is a very important step for poverty reduction since it creates new job opportunities in a higher productivity sector, it is not a panacea for development of human capabilities. From the point of view of human capability, the sustainability from the productive side of the system is dependent on at least three other fundamental factors: environmental sustainability, social protection and political participation. In the medium term there is no sense in income-generating activities producing too many negative externalities dangerous for health and causing environmental degradation, given that they will negatively influence the system of production. Social protection and basic social services are the platform for long-term development of the local system. Participation is the key for institutional changes.

In other words, in economies with a high share of the labour force in informal sector employment, the triggering of the second synergy may well require a special policy package to promote micro-enterprises. In South East Asia this task will be easier on account of the relatively equal distribution of human capital in the population; in South Asia, with much worse health and education indicators, the effectiveness of the strategy will be compromised by the unequal distribution of human capital through the population.[15] To encourage this dynamic should be the aim of a policy directed at SMEs plus micro-enterprises.

2. Some Features of the Informal Sector, Subcontracting and Home Based Work in South East and South Asia

Home based workers form a significant part of the informal sector in any developing economy. There is much that distinguishes the formal from the

15 That is why we argue in the companion paper for the need for universalising access to quality schooling and health care services in South Asia – in much the same way that East Asia, and many (if not all) of the selected South East Asian countries have succeeded in doing.

informal sectors. The formal sector is characterised by capitalist enterprise, the informal by family ownership; barriers to entry as against ease of entry; capital intensity as against labour intensive technology; formal training as opposed to skills being acquired outside of formal education; within the ambit of government policy as against being outside government control; often unionized versus normally being non-unionized; regulated markets versus highly unregulated markets for labour, capital and products (Lund and Srinivas, 2000).[16]

On account of the relatively fast growth of manufacturing in South East Asia, the informal sector has grown in absolute terms. In other words, perhaps one could argue that the *pull* factors from the formal manufacturing sectors have been great in the expansion of the informal sector in South East Asia. In South Asia the slow increase in agricultural output has led to farm incomes remaining stagnant, with surplus labour being pushed out to non-farm activities, whether in productive or non-productive activities – essentially as a survival strategy, to make a living. In either case, urban-based, informal sector activities in manufacturing have grown in both South and South East Asia, while also spreading to rural areas.

What is interesting about this informalisation of the non-agricultural labour force in developing countries is its feminisation (Charmes, 2001). There are more women in manufacturing – women make up more than a third of the labour force in manufacturing in some countries, and almost one-half in some Asian countries (Gammage and Mehra, 1999). Similarly, in Latin America, the expansion of informal employment and the shift of employment from industry to the services sector have major gender dimensions (Tomei, 2000) – women are over-represented in the informal economy and in the services sector in Latin America. Women often take on production (or increasingly services in Latin America), working from home – which saves them travel time, and offers them the possibility of adding to family income while still being engaged in their reproductive role. Women who were hitherto non-earning members of the household, or engaged in traditional activities on their own account, now take on new types of work on a subcontracted basis.

16 What is the informal sector? One of the new characteristics of the System of National Accounts (SNA) 1993, approved by the UN Economic and Social Council (at the recommendation of the 15th International Conference of Labour Statisticians (ICLS) and the UN Statistical Commission), is the recommendation to introduce, where relevant, a sub-classification of the households sector, including a distinction between the formal and informal sectors. This would make it possible to quantify the contribution of the informal sector to the national economy (Hussmanns, 1997). The informal sector was considered a subsector of the SNA institutional sector 'household'. In accordance with the SNA 1993, household enterprises - as contrasted with corporations and quasi-corporations - are defined as production units which are not constituted as separate legal entities independently of the households or household members that own them, and for which no complete set of accounts (including balance sheets of assets and liabilities) are available which would permit a clear distinction of the production activities of the enterprises from the other activities of their owners. Within the household enterprises a distinction was made between enterprises of employers and own-account enterprises.

Formal sector employment in manufacturing has grown slowly in all developing countries, although this is somewhat less the case in the fast-growing economies in South East Asia (Indonesia, Thailand, Philippines), compared to the slow-growing ones in South Asia. In Pakistan, in rural areas, 73 per cent of all economically active females, and 68 per cent of such males, were in the informal sector; in urban areas, 61 per cent of all working women, and 64 per cent of such men, were in the informal sector (Khan et al, 2001). In India, as much as 80.3 per cent of the non-agricultural labour force is in the informal sector (with the remaining 19.7 per cent in the formal sector). The shares of the informal sector, though still large in South East Asia, are not as significant as in India. Half of the Indonesian and Thai non-agricultural labour force is in the informal sector, while in the Philippines the share reaches 63.8 per cent (Table 2a).

Home workers in India represented 35.9 per cent of employment in the non-agricultural informal sector in 1999 (Table 2b). As much as 59 per cent of India's home workers are in manufacturing. What is significant is that of all home workers in manufacturing 75 per cent are in rural areas (were 56.4 per cent of all home workers in all sectors are located). Also in the Philippines, where home workers are 9 per cent of the informal sector labour force, more than half of home workers are rural dwellers (56.9 per cent). Almost all hbw in the Philippines is in the manufacturing sector (and this is concentrated in urban areas); only hbw in services is found in rural areas. Also in Thailand most of the home workers are in manufacturing. Thus, home workers are found in manufacturing and services, but also in agriculture (as we will see in this paper), and in both rural and urban areas.

▪ 2.1 *The phenomenon of subcontracting*

There are many features that separate the formal from the informal sectors, but at least in manufacturing there is one strong link between the two especially in Asia and Latin America – the phenomenon of subcontracting (to smaller firms which in turn subcontract to home based workers).[17]

Trends in the international economy have tended to increase the role of subcontracting. The post-World War II period saw the development of essentially two types of international subcontracting: producer-driven commodity chains, and buyer-driven commodity chains, with the difference lying in the location of the key barriers to entry (Gereffi, 1994). In producer-driven chains, large transnational companies play a central role in coordinating a production network, including backward and forward linkages. Such chains operate in capital and technology-intensive commodities e.g. automobiles, aircraft, semiconductors, electrical machinery (e.g. the Ford Escort is manufactured and

17 In only a few African economies is subcontracting from formal to informal sector enterprises found widely (Xaba et al, 2002).

Table 2a: *Informal sector employment (million and per cent)*

INDIA (1993/94)	Labour force	Per cent of labour force
Agricultural labour force	264,4	68.0
Non-agricultural labour force	124,6	32.0
Non-agricultural formal labour force	24,6	19.7
Non-agricultural informal labour force	100,5	80.3
Total Labour force	389,0	100.0

Source: based on National Sample Survey 50th round

PAKISTAN (1999)

Proportion of non-agricultural workers (10 years and above) formal and informal sector by gender and region

	Rural		Urban	
	Female	Male	Female	Male
Total non-agricultural workers	100	100	100	100
Formal	26.9	32.4	39.3	35.9
Informal	73.1	67.6	60.7	64.1

Source: Government of Pakistan, Labour Force Survey 1999-00 (2001, p.21)

INDONESIA (1999)	Labour force*	Per cent of labour force
Agricultural labour force	38,4	43.2
Agricultural informal labour force	31,6	35.6
Non-agricultural labour force	50,4	56.8
Non-agricultural formal labour force	25,5	28.7
Non-agricultural informal labour force	24,9	28.0
Total Labour force	88,8	100.0

* working labour force

Source: Sakernas 1999

PHILIPPINES	Informal sector employment Per cent of total employment	
	1989	1993
All sectors	76.9	81.1
Agriculture. fishery. forestry	97.9	98.5
Non-agricultural	59.5	63.8
INDUSTRY	66.2	70.6
Mining and quarrying	60.3	60.4
Manufacturing	52.4	62.3
Electricity. gas. water	0.27	2.12
Construction	85.0	88.8
SERVICES	68.2	64.8
Wholesale. retail trade	78.9	88.0
Transportation. storage. communication	81.0	82.1
Financing. insurance. real estate	29.6	38.9
Community. social. personal services	40.9	37.7

Source: Country report. Modified Residual Approach.

THAILAND (1994)	Labour force (1000)	Per cent of labour force
Agricultural labour force	17,96	56.0
Non-agricultural labour force	14,13	44.0
Non-agricultural formal labour force	6,86	48.6
Non-agricultural informal labour force	7,26	51.4
Total labour force	32,10	100.0

Source: The 1994 Formal and Informal Labour Force Market Survey, National Statistical Office

Table 2b: *Home-based work in the informal sector by location, employment (per cent)*

INDIA	Total	Urban	Rural
Total informal sector (Non-agric.)	100.0	43.6	56.4
Other (Non HBW sector)	64.1	48.0	52.0
HBW sector	35.9	30.0	70.0
Sub-sectors (% of HBW)			
Manufacturing	59.0	25.0	75.0
Trading and repair services	23.5	34.0	66.0

Source: National Sample Survey Organisation. 2000.
Non–agricultural enterprises in the informal sector in India 1999-2000. Key Results. NSS 55th round (July 1999-June 2000).

PHILIPPINES (1993)	Total	Urban	Rural
Total informal sector	100.0	_	_
Other (Non HBW sector)	91.0	_	_
HBW sector	9.0	43.1	56.9
Sub-sectors (% of HBW)			
Agriculture/fisheries	0.5	95.5	0.5
Manufacturing	97.8	78.6[a]	21.4[a]
Services	1.6	3.3[a]	96.7[a]

[a]adjusted estimate based on certain regions not entirely national
Source: NSO 1993

THAILAND	Total	Urban	Rural
Informal sector[b]	100.0	10.8	89.2
[c]LF (aged 13+) involved in HBW	100.0	20.6	79.4
[c]HBWers in Manufacturing sub-sector			
Manufacturing	95.4	_	_
Leather products	3.7	_	_
Paper products	1.0	_	_
Construction	0.0	_	_
Commerce	3.3	_	_
Service	1.1	_	_
Transport and communication	0.0	_	_
Agriculture	0.1[d]	_	_

Sources: NSO Survey 1999; [b]The 1994 Formal and Informal Labour Force Market Survey, National Statistical Office; [c]The 1999 Home Work Survey, NSO
[d]The number here seems particularly low; this may be because only those involved in activities based in the home were counted. Thus, the hybrid seeds contracted work which is carried out in the fields was not included.

assembled in 15 countries). There is little scope for subcontracting to households in such industries. Buyer-driven commodity-chains are usually operated by large retailers and brand-name merchandisers. Such large retailers as K-Mart and Walmart would play a central role. Such chains operate in labour-intensive consumer goods like garments, footwear, toys, and houseware. The production of such goods is usually located in developing countries, while the high-value activities (e.g. design and marketing) are in industrialized countries. The trend of global manufacturing is to move from producer-driven to buyer-driven chains in international subcontracting (Gereffi, 1994).

As mentioned earlier, there is evidence that both informalisation of the labour force, as well as its feminisation, have grown in recent decades. While perhaps it is less easy to establish empirically that subcontracting has grown, there are sound reasons for arguing that subcontracting has also grown. There is some fragmentary evidence that subcontracting involving home based workers should have increased with increased export production in developing countries.[18] The most successful exporters among developing countries have been those engaged in labour-intensive manufacturing in the last three to four decades. In many export-oriented product groups, low labour costs have provided the cost advantage to developing countries – garments have been an increasingly important example, but not the only one. Labour intensity is high in such products. High labour costs in Europe, Japan and North America have driven firms in industrialized countries to outsource manufacturing of consumer non-durables to South East and South Asia, as well as Latin America. Thus there is reason to believe that subcontracting should have grown with export-orientation, and with it, home based work.[19]

Historically, export-oriented labour-intensive manufacturing grew most rapidly first in the East Asian newly-industrializing countries (NICs) – Taiwan, Korea (also Singapore, Hongkong) – in the seventies. The same pattern of growth was rapidly emulated by the South East Asian economies – Malaysia, Thailand and Indonesia – from the late seventies onwards. Thus the Thai government adopted a policy of industrialization for export with special emphasis on labour-intensive industries during the fourth national development plan (1976-81), like Indonesia and the Philippines. Thus, exports expanded so rapidly from these countries that in 1980 and 1990 exports accounted for 24 and 34 per cent of Thai GDP respectively, 25 (data of 1982) and 26 per cent of Indonesia's,[20] 23 and 28 per cent of that in the Philippines. Even more remarkably by 2000, those shares had risen to 67 per cent for Thailand, 39 per cent for Indonesia, and 56 per cent for the Philippines (World Bank, 2002). Buyer-driven subcontracting chains in footwear, garment-making and textile industries were directly involved in the expansion of these labour-intensive manufactures. In other words, with the growth of export-orientation in policies subcontracting is likely to rise, including subcontracting to home based work.

In fact, the tremendous success of first the East Asian, and then the South

18 The phenomenon is widespread in the middle-income countries of Latin America. See, e.g., a set of studies for the ILO in eight countries – Argentina, Brazil, Chile, Guatemala, Costa Rica, El Salvador, Paraguay, and Peru (Tomei, 2000; Verdera, 2000; Jelin et al., 2000; Lavinas et al., 2000; Henriquez et al., 2000; Heikel, 2000).

19 It is not surprising that garments have been the most studied area of hbw in recent years (see the set of studies conducted by ILO in the early nineties in South East Asia, and those by the Asia Foundation in 1990-9). Balakrishnan (2002) from the Asia Foundation, which draws on country studies in Sri Lanka, India, Pakistan, Thailand and the Philippines.

20 In Indonesia there was a sharp reduction in the early '80s. In 1980 exports accounted for 34 per cent of GDP. Due to the oil crisis, this share was reduced to 29 per cent in 1981 and to 25 per cent in 1982.

East Asian countries in labour-intensive manufactured exports, based on their labour cost advantage, saw many other countries adopting similar commercial procedures in turn. For the high and middle-income countries of Latin America it has been used as a strategy to defend against competition from Asian products, just as in East and South East Asia subcontracting has been an integral part of a strategy of export-oriented industrialization based on labour-intensive products.

Often the lack of social protection of workers is due to competitiveness in the globalisation of production which involves home workers at the end of the value chain (Tomei, 2000, McCormick and Schmitz 2002). The exploitation of home based workers by the local employer through the value chain is thus often connected to the international market and the global value chain. This global competition to cut costs and to avoid tax determines the unclear location of profits since multinational companies locate geographically using a 'predatory practice'. The competition between costly labour and cheap labour and between tax conditions (and the distribution of tax-monitoring) among states, ends up ultimately under-mining the workers at the expense of social protection. Thus, in recent years, some Latin America countries followed a defensive strategy to remain competitive, as cost-cutting in formal enterprises constrained formal workers to become informal workers (e.g. hbw), thus losing their social protection. South and South East Asia had no protection at all.

Table 3: *Market for selected products of hbw*

	Foreign Market	Domestic Market	Regional Local Market
INDIA			
Incense stick making	X	X	X
Bidi (MP+TN)	X	X	X
Zardosi	X	X	X
PAKISTAN			
Incense stick making	x	X	
Carpet weaving	X	X	
Sack stitching	X		
Prawn peeling	X	x	
INDONESIA			
Pottery	x	X	X
Rattan	X	X	X
Batik	x	X	X
PHILIPPINES			
Home décor	X	X	X
Pyrotechnics		X	
Okra	X		
Fashion accessories	X	X	X
THAILAND			
Paper products	X	X	x
Leather craft	X	X	x
Hybrid seeds	X	x	

Note: X = relevant; x = minimal
Source: UNICEF survey and country reports

In our studies, there are several sectors involving buyer-driven chains in international subcontracting – in manufacturing (e.g. leather goods in Thailand and carpets in Pakistan) and in agriculture (hybrid seed production in Thailand and okra production in the Philippines). The product groups in our studies often have both an export as well as domestic market (Table 3).

The export share of GDP differs sharply between the middle-income countries of South East Asia in our sample, and the low-income countries of South Asia where we have studied the phenomenon of hbw. As we saw above, the former have a relatively high share of exports in GDP. By contrast both Pakistan (15 per cent) and India (11 per cent) have much lower shares. However, in export-oriented product groups the phenomenon of subcontracting is likely to have grown in South Asia as well; the need to cut costs has resulted in the growth of subcontracted manufacturing in South Asia for the domestic market. In the India study it is clear that at least two of the products – incense sticks and zardosi-emboidered garments – both have a large export market, and this market has grown in the 1980s and 1990s; the export market for bidis is shrinking. The study suggests that subcontracting is, therefore, likely to have grown in the products where the market has been growing. In Pakistan, too, carpets, incense and shrimps are three export products and it is most likely that their growth has lead to greater subcontracting.

Our studies also find that subcontracted home based manufacturing work is a phenomenon to be found in both rural and urban areas in Asia – in contrast to the situation in Latin America (the other region in the developing world where subcontracting has become widespread).[21] The fact that – driven by cost considerations – hbw has grown with a view to capturing export as well as domestic markets, and spread even to rural areas, seems to confirm our discussion in the previous sections of cluster theory. As discussed in the previous section, hbw clusters develop because employers and intermediaries need to reduce transaction costs associated with input and raw material distribution, output collection, contract enforcement and the dissemination of information. The theory predicts that either the presence of a specialised skill in a particular geographical area, or simply the presence of a concentrated body of unskilled surplus labour can provide the basis for subcontracting growth to home workers.

21 In recent studies in Latin American countries, home work is shown to be a predominantly urban phenomenon. A second contrast between Asia and Latin America is in respect of the sectoral distribution of homework: in Latin America it prevails in the services sector (personal and repair services, the promotion or sale of goods and services like insurance, credit cards, courses, travel) in all the six countries reviewed, while most of the Asia studies (including ours) suggests that the majority of home workers are in the manufacturing of goods. A final area of contrast is that in Latin America men's participation in industrial homeworking is much more significant than women's (with the sole exception of the garment industry); women are the majority of workers in low-productivity, low-paid service activities in Latin America (Tomei, 2000). The fact that women in Asia are mainly involved in production of goods in both rural and urban areas may well provide a good basis for pursuing a growth strategy based on public action to support micro-enterprises.

In a word, home based income generating activities can play an active role not only in the human development of a household, but also in fostering local economic development, through an increase in the human capital of the local labour force and through the development of micro-enterprises and small and medium enterprises. In brief, the challenge for policy is to minimise the vulnerability of workers in hbw, while supporting the elements that ensure efficiency in production. In other words, the challenge is to limit the trade off between efficiency and equity.

3. Methodology

Within this theoretical framework, and empirical overview of the informal sector in Asia, we turn now to our survey instruments. Both quantitative and qualitative methods were adopted for each national study on subcontracted hbw work by women and children in five Asian countries. The quantitative method involved an *ad hoc* household survey, based on a core questionnaire designed by UNICEF, largely common to all the countries. In particular, the questionnaire was divided into different sections regarding social information as well as general economic and non-economic activities.[22] The qualitative methods, focus group discussions (FGDs, one with women workers, and the other with child workers) and case studies, were used for each sector/cluster, parallel to the quantitative survey. At least three sectors/clusters have been examined in each country.

The sample design for the survey data collection is purposive (*ad hoc*). The statistical units of the population surveyed are the households engaged in hbw work. This population is active in the informal sector and thus very often 'invisible' to official statistics. It would thus be impossible or excessively expensive to prepare a list of households engaged in hbw work (including in a given sector). For this reason the design of the sampling had to follow a specific method taking into account the information already available.

We had information *a priori* that the hbw work households involved in manufacturing are generally clustered. In particular, they tend to be clustered in a specific location on the basis of the type of goods being produced. A sec-

22 The questionnaire had the following sections: i.) Household characteristics: this section covered basic information about the household along with their social and ethnic background. Data on age, sex, marital status, educational status, occupation was collected for each person in the household. ii.) Economic profile of the household: including average monthly expenditure and income of the household. iii.) Information related to home based work: including details on the type of hbw, hours of work, days worked per week, months worked in a year, average wages earned, expenditure on raw materials, sources of funds, nature of contract, etc. iv.) Time allocation and work organisation. v.) Home based workers women's organisation: intended to capture benefits received from employer/contractor, and general awareness of worker issues. vi.) Child related: including extent of contribution of work by children and its effect on their education and household economy. vii.) Health: specially health problems suffered due to work. viii) Perceptions: relating to policy interventions and to child work.

ond characteristic, very important for the sample design, is the degree of socio-economic homogeneity of hbw work households (this emerges in the literature and also in our FGDs), which is very high within each sector/cluster.

The first problem to be solved in the design of the sample at national or regional level was the identification of three/four home based work manufacturing sectors and to decide on the specific clusters to be surveyed. The sectors selected all involve subcontracting (as almost all home based work activities). Furthermore, if compatible with the sampling design, the products of at least one sector in each country were exportable, so that the links with the global market can be drawn.

Considering that there are hundreds (or even thousands) of clusters of hbw work in each country – even if a list of these was available (and this is not the case) – a purely random choice is not the right way to proceed. This is the reason for the small number of clusters selected for the *ad hoc* micro-surveys in each country. For this reason the best way to proceed is to ask expert 'privileged observers' to identify the sectors/clusters to be surveyed (Fabbris, 1990). The sector/cluster selection probability is connected to the 'probability' of the experts to correctly identify those specific sector/clusters for the survey. Further, in each country we sought advice from more experts from different institutions (local agencies, NGOs, workers' associations, researchers, government authorities) representing different categories of interest in order to compensate for an eventual bias in 'privileged observer' selection.

The outcome of this sampling method can be considered very close to a pure random sample at different levels in each country. The samples obtained should be close to representative for home based work households in India at national level, for Pakistan for the city of Karachi but extendable – given the *a priori* information (Khattak, and Sayeed, 2000) – to the other urban areas of the country, and for Indonesia for the West and Central provinces of Java. In view of this proposition, only the data collected for India, Pakistan and Indonesia are used in the micro-econometric analysis in support of the theoretical discussion on inter-generational transfer of poverty and in order to draw policy implications later. The samples for the Philippines and Thailand, on the other hand, are representative at sector level only. For these two countries, when the tables refer to the aggregate 'all' (given by the sum of the sectors) we imply that the value is mainly indicative.

The sectors/clusters locations selected, the sample size and the number of households interviewed are presented in Table 1.[23] Here we briefly present some details about the sample method in each country. (If certain information

23 The home based workers in the sample were defined to include subcontracted workers, working from their home, or self-employed workers, working from their home. The categories are not mutually exclusive, and no effort was made to distinguish between "subcontracted workers" and "occasionally subcontracted workers". The majority of workers surveyed was found to be subcontracted workers; the same workers might be self-employed part of their time.

was not collected in the survey or the data were not comparable, this is indicated with a dash.)

In *India*, as in the other countries, the first step was to choose the manufacturing sectors and to decide the sector/cluster locations to be surveyed. According to a nationally representative sample survey (carried out by the National Sample Survey Organisation), there are 30 million home based workers in India and they are concentrated (around 70 to 85 per cent) in three sectors: bidi,[24] incense stick (agarbathi) and garment (among which zardosi[25]) manufacturing. These sectors were thus chosen to be part of the sample design. The sectors/clusters and the locations were identified through an interaction with 'privileged observers' such as the Ministry of Labour (Labour Ministry officials), representatives of Self-Employed Women's Association (SEWA), representatives of the Social Security Association of India and representatives of UNICEF India office. The Ministry of Labour is engaged in the formulation of a National Policy on Home Based Workers and for this purpose has compiled a list of sectors in which hbw work is known to be significant. This list provided the starting point. The second step was to identify the locations of the clusters. The clusters chosen by the above mentioned experts are in different/distant geographical areas (Uttar Pradesh, Karnataka, Tamil Nadu, Madhya Pradesh) of the country and this helps to capture the different characteristics among Indian States.

For *Pakistan* the selection of the sectors/clusters (carpet weaving, incense stick-making, shrimp-peeling, and sack-stitching) locations took into account previous studies that emphasised the similar characteristics of hbw work households in Pakistan's urban areas. The experts interviewed picked Karachi, Pakistan's largest industrial city by far, because most hbw work activities take place there. Also, the close links of the research institute commissioned to conduct the research with PILER (Pakistan Institute of Labour Education Research), engaged in action research/training based in Karachi, facilitated the fieldwork. The sectors chosen would be representative of (urban) slums areas. The field team, after discussions with PILER project leaders and the Aurat Foundation in Pakistan, carried out the sector identification.

In *Indonesia* the choice of sector/cluster (rattan furniture, ceramic pottery and batik printing on garments) locations for the *ad hoc* survey was again based on *a priori* information and expert collaboration. The setting of home workers in the wider labour market is based on analysis of the National Labour Force Survey data collected by the CBS (Central Board of Statistics) and in particular the results of the latest Economic Census of 1996 were used. One of the team consultants was a member of the CBS. Experts from different institutions and independent researchers were involved as well. Among the experts there

24 Tobacco leaves rolled to make cigarettes, consumed largely by the urban poor and in rural areas.

25 Embroidery on garments, with gold thread, involving skills usually passed on from generation to generation.

was a representative from MWPRI (Mitra Wanita Pekerja Rumahan Indonesia or National Friends of Women Home-Workers).[26]

The sectors selected were batik in the province of Central Java, and rattan and ceramics in the province of West Java. Once the regencies (administrative area) were identified, two clusters in different districts were chosen for each sector. The unit for data collection, as for the other countries, was the household. Identification of potential households for inclusion in the study was delegated to the staff of local statistical offices at the regency level. Staff members of the regency statistical office were requested to list about 250 eligible households, in 2 to 3 villages located in either one or both districts identified by the central office. To determine eligibility the hbw household was to have a female home based worker in the selected sub-sector and a child between the ages of 6 to 15 years. This second criteria helped to reduce the sample size since the core of the study was concerned with children in this age category. It was from this list that interviewers selected the households. In each sub-sector the questionnaire was administered to 70 households, plus 30 households to serve as the control group (CG). Replacements were found through a 'snowballing' technique whereby the next household was found using information obtained from a household fulfilling the eligibility criteria.

In *Thailand* the sectors/clusters locations were chosen with the collaboration of the field research team, the Office of Home Based Workers (Ministry of Labour and Social Welfare) and Homenet (network of NGOs working to promote research and development for home based workers). The survey covered the central, north and north east regions of the country. The criteria for the selection of the home based sectors/clusters (saa paper, leather craft and hybrid seeds production) were the involvement of subcontracting in the production process and the production both for domestic and foreign markets. The survey included 305 households engaged in hbw, and 94 CG households. The survey was conducted in both rural and urban areas, though the majority of the households surveyed were in rural areas.

In the *Philippines* the locations of sectors/clusters were chosen following the recommendation of UNICEF Manila and the NGO Patamaba, involved in the research. The selected locations were Luzon and Visayas. The choice of home based sectors/clusters was based on the involvement of subcontracting and production for the domestic and export markets. The selected sectors were pyrotechnics production in Bulacan, okra production and packaging in Tarlac, home decor (christmas lights and christmas balls) production in Rizal, and fashion accessories production in Cebu. The Tarlac and Bulacan sites were rural, while Rizal and the site for fashion accessories in Cebu were at the outskirts of the two major Philippine cities – Metro Manila and Cebu City

26 The researcher was also involved in the ILO-DANIDA project and in charge of the World Bank funded study on home based workers in Indonesia. MWPRI is a member of Homenet International in Thailand and Philippines as well. Homenet International was invovled in the research design and process.

respectively. The sample was equally distributed between urban and rural areas.

So that comparisons could be made in all countries a control group of households in the same geographical area, not engaged in hbw (with no single family member working in any home based activity) was included in each sample. The CG consists of households in the same neighbourhood as hbw households. If the area was rural then households from the same/neighbouring village were included; if urban, the same neighbourhood. The survey data shows they had roughly the same income level.

The hbw households (households with at least one family member working mainly in the home based sector) were chosen randomly. In other words hbw households included in the samples were not pre-selected for the presence of child workers. The sampling method at the micro-level is slightly different among the countries. The portion of the hbw households interviewed were a large part (more than 50 per cent) of the hbw population of each cluster (very close to a micro-census in some of the clusters surveyed).

In this context a relevant aspect is the possibility of variability among the households of the sample. As we expected, the population of the hbw households is extremely homogeneous within each cluster. The homogeneity in each location is very strong and even the CG (or non-hbw households) shares similar socio-economic characteristics. The reduced variability diminishes the importance of the dimension of the sample size and increases the importance of the selection method. Thus, although a purely random choice could not be carried out the methods used assure an outcome very close to a random choice (Smith, 1983).

4. Profile of Sectors

This section presents the sample size covered in both rural and urban areas for the hbw and CG households, the city and region where hbw activities take place, location of the sectors i.e. urban or rural, the type of activity involved, and the dynamics of the size of the market for the hbw products.

The three to four sectors examined in each country are listed in Table 1. The sectors in *India* are incense sticks (agarbathi) in Bangalore district (in the state of Karnataka); bidi-making (tobacco leaves rolled to make cigarettes) in Indore (in the state of Madhya Pradesh) and Vellore district (in Tamil Nadu); and zari/zardoshi (embroidery on garments) in Lucknow district (in the state of Uttar Pradesh). In incense, zardoshi, and bidi (in Tamil Nadu) the sample covered rural, peri-urban and urban areas, but was limited to an urban area in bidi in Madhya Pradesh. Of the 452 hbw households, there were 225 rural and 227 urban households in the sample in India. The CG consisted of 151 households. The market for all three product-groups is external as well as domestic.

In *Pakistan* four sectors were chosen, all located in the major city port of

Karachi, on the Arabian Sea coast. There were 303 hbw households in the sample, and 94 in the CG – all located in urban areas. The four sectors were incense stick making (the same as in India), carpet weaving, sack stitching, and prawn peeling. The market for carpets, prawns, and incense sticks is predominantly external, and to some extent domestic; for sacks it is both. In terms of the ethnic composition of the groups engaged in hbw, three were immigrant communities (Burmese muslims from Myanmar and Bengali muslims from former East Pakistan), and in the fourth sector (sack stitching) the community had migrated to Karachi at the time of independence from the Indian state of Gujarat.[27]

In *Indonesia* three sectors were selected – batik printing on garments, rattan furniture and ceramic pottery. There were 210 hbw households in the sample, and 90 in the CG. The site for the batik sector was in central Java – an area long known for Indonesia's famous batik work – in three villages, located 10-15 kms from the sub-district capital. While the general area is known as a batik centre, most men in the villages selected rely on fishing and farming for their livelihood. Batik-making at home is essentially women's work. Farming, fishing and batik skills are passed on from generation to generation, and learned from experience rather than formal education or training institutions.

The rattan sites selected were an urban centre (Tegalwangi on the northern coast of Java) and two smaller villages (in Cirebon district). Tegalwangi is an urban centre associated with the rattan furniture industry, while the villages are largely agricultural with rice fields. As the terms of trade for agricultural products, especially rice, continue to fall, villagers prefer to find income earning opportunities through off-farm work. The third site, chosen for the third sector – pottery – consisted of the village of Anjun (in district Purwakarta), which is known as West Java's small-scale pottery industry centre. All three products are mainly produced for the domestic market, but they are also exported.

In *Thailand*, of the three sectors chosen, two were in manufacturing – paper products (saa[28] paper, artificial flowers, etc) and leather crafts – and one in agriculture, hybrid seeds production. There were 305 hbw households in the sample, and 94 in the CG. All three product-groups have a strong external market, but with a domestic market as well. Two villages were selected in northern Thailand for paper products. Most villagers are rice farmers; families also have their own mixed fruit garden, and during farming periods hbw is not undertaken.

Hybrid seed production, an agricultural activity, is carried out in the field

27 The sample was not purposively chosen for its ethnic composition. The control group happened to consist of Punjabis who had migrated from north Pakistan to Karachi.

28 Saa paper is made from a fibrous raw material called mulberry which is extracted from the plant's (Broussonetia papyrfera, Veng.) bark. It is used as wrapping paper, and to make scripture paper, hand-held fans, umbrellas, and artificial flowers, greeting cards, notebooks, photoframes and countless other home decorations. The raw material is ordered from northern and southern Thailand.

rather than at home.[29] Nevertheless, it is part of the informal sector and is carried out on family farms. Hybrid seeds are used to grow water melons, chile peppers, cantaloupe, and several vegetables. However, the seeds from these high-yielding crops are sterile, so farmers have to buy from seed companies in order to produce the new round of crops. The production of the crop and of seeds is mostly for export.[30]

In the *Philippines* there were four kinds of activities selected for assessing hbw – home décor (specifically Christmas balls and lights; metalcraft e.g. wrought iron baskets); fashion accessories (e.g. wood bead necklaces); pyrotechnics (or firecrackers); and okra vegetable production. There were 135 hbw households in the sample, and 38 in the CG. Only fireworks are produced for the domestic market; the other product groups are mainly for export; okra production is only for export. All utilise the subcontracted labour of homeworkers. Okra growing is unique because, like hybrid seed production in Thailand, it does not involve the usual 'in-house' production.

In India, of the three sectors chosen, only bidi-making seemed to be a declining industry in terms of the size of the market; and in Indonesia rattan furniture was also regarded as a declining industry. However, all other activities in the other countries seemed to be growing markets, regardless of whether they were traditional activities (e.g. pottery, leather, zardoshi) or more non-traditional ones (e.g. okra production, hybrid seed production, prawns). The Thai sectors were strongly influenced by the Asian crisis.

Almost all product groups chosen could be regarded as manufacturing activities; only three involved the processing of agricultural products: prawn peeling in Pakistan, okra production in Philippines, and hybrid seed production in Thailand (all three for export). In fact, much of hbw in Asia involves manufacturing activities. However, this does not mean that hbw is confined to urban areas. In fact, the subcontracting of such manufacturing activities extends to the rural household. Rural areas were part of the sample in India and Indonesia (though not in Pakistan, where all locations are in Karachi). In this sense it holds out the prospect of bringing rural areas into the fold of manufacturing activities.

5. Home Based Work in the Value Chain

There is a value chain in the production process where subcontracting is involved. The value-adding economic activities usually have different stages: design, purchase of raw materials or inputs, production (which can be further

29 Technically this is not seen as home based work, according to the government of Thailand's Office of Home Based Work, and hence receives little attention or protection from government, unlike the other two sectors.

30 There is fierce competition among seed production companies in the region, and Thailand has suffered a quota reduction, with quota being allocated to Vietnam because of its fertile land, industrious labour and low wages.

divided), distribution through wholesalers and retailing. The characteristics of a value chain are thus connected to the nature of the stages involved, the division of the production processes, the input–output structure, the geographical spread of the activities and finally the governance (direct or indirect control) which shape the subcontracting network.

Although clustered, hbw households tend to work in isolation. If a hbwer is not a member of an association her isolation is as extreme as her vulnerability. The lack of contact with the final consumer is another weak point for home workers. Knowing how and by whom a chain is governed helps to understand the distribution gains among firms along the chain and how possibly to intervene to obtain social protection e.g. since firms are vulnerable to public opinion in their home countries (McCormick and Schmitz, 2002).

We examine the value chain issues and the relationship between the subcontractor and the home based worker by country in the remainder of this section. In manufacturing, the home based worker is part of a production value chain, and, above all, paid on a piece-rate. The questionnaire sought information as to whether the home workers had verbal or written agreements, whether the subcontractor delayed payments for work or engaged in other malpractices, and whether workers frequently switched between subcontractors or had stable, long-term relationships with them. We also investigated the question of the share of home workers in the final value (or price) of the product they produced.

The vulnerability of the home based workers is well captured by the fact that like most informal sector activities, almost none of them have written contracts with their subcontractors (Table 4). In India not all contracts are written. In Pakistan the share is close to 90 per cent. In Indonesia the conditions of work are bound by verbal contracts in over 93 per cent of the cases in two of the three sectors, and 83 per cent of the cases in the third (rattan). In Thailand, a similar situation prevails in two of the three sectors. In the Philippines over 90 per cent in all sectors had only verbal agreement. However, hybrid seed production is unique among all sectors examined in all five countries in having written contracts in three-quarters of the cases; the relationship here is highly formalised with a variety of conditions laid down. This is the case because hybrid seed production by farmers is undertaken on the basis of a sale (of seeds) – purchase relationship.[31]

If one can broadly distinguish between two types of hired labour, casual and permanent, then home workers are more like casual workers in that they are paid on a piece-rate,[32] but they are unlike casual workers in that they usually have longer-term stable relationships with subcontractors, which are far from permanent. In fact, they have none of the benefits that usually come with

31 Since these are genetically modified plants, the farmer must buy the seeds each year from the 'selling' (or subcontracting) company, for which the farmer produces.

32 Not all casual workers need be paid on a piece-rate; they could be paid on a daily rate, depending upon the nature of the activity.

permanent contracts, including being paid on a time basis (e.g. an eight-hour day), rather than a piece-rate basis. Another feature of home based productive activity, is its seasonality of output based on varying demand, since firms often subcontract out production at times of high season.

To avoid repetition, we describe here the value chain in just one sector (incense sticks) in one country (India), though the value chain is usually similar for most product groups considered in this study:

1. The value-chain begins with the home based worker. Incense stick rollers are usually women who operate mainly from their home.
2. The raw incense stick manufacturer (subcontractor/contractor) supplies raw material to the home workers as well as collecting the finished product from them.
3. The perfumed incense sticks manufacturer perfumes and packages the sticks.

Table 4: *Hbw type of contract - verbal or non-verbal? (per cent)*

	Type of contract		
	Written	Not written	Total
INDIA			
Incense stick making	0	100.0	100.0
Bidi (MP+TN)	0	100.0	100.0
Bidi (MP)	0	100.0	100.0
Bidi (TN)	0	100.0	100.0
Zardosi	0	100.0	100.0
All	0	100.0	100.0
PAKISTAN			
Incense stick	3.9	96.1	100.0
Carpet weaving	10.4	89.6	100.0
Sack stitching	22.7	77.3	100.0
Prawn peeling	10.8	89.2	100.0
All	11.9	88.1	100.0
INDONESIA			
Pottery	7.0	93.0	100.0
Rattan	17.1	82.9	100.0
Batik	4.6	95.4	100.0
All	9.6	90.4	100.0
PHILIPPINES*			
Home décor	9.3	90.7	100.0
Pyrotechnics	5.0	95.0	100.0
Okra	0.0	100.0	100.0
Fashion accessories	7.7	92.3	100.0
All	5.8	94.2	100.0
THAILAND**			
Paper products	1.0	99.0	100.0
Leather crafts	1.0	99.0	100.0
Hybrid seeds production	76.2	23.8	100.0
All	25.9	74.1	100.0

Note: *Did you sign any contract with person who ordered products from you the first time?

** Source: Country report

Source: UNICEF survey

4. The dealer or stockist distributes the perfumed sticks to wholesalers or semi-wholesalers (semi-wholesalers also do some retailing).
5. The retailer sells the final product.

A word here about the subcontractors, who are just above the home workers in the value chain, is in order here. The intermediaries are often skillful organisers and coordinators. In a certain sense they are the corner stone of the subcontracting system. They are used by the employers to reduce transaction costs and to manage the network of home workers. They are also used to train the home workers in specific skills or simply to transmit the orders (from the principal firm) for the production.

Thus in *India* we find that between the home worker at one end of the spectrum, and the retailer at the other end, there are usually four or five intermediaries. The number of intermediaries and the bargaining strength of the home worker has implications for the share of the final consumer price that accrues to the home worker. There may also be sector-specific technology-related factors which determine the home workers' earnings. We also find that for a commodity that costs Rs 100 to a consumer, the home worker receives Rs 15 in zardoshi; Rs 17 in bidi, but only Rs 2.3 in incence sticks (the latter is said to be so low because the cost of perfuming the incence stick is high). The retailer obtains high shares in zardoshi – as with most high-valued garments and clothing products. In bidi and incence sticks, manufacturers obtain high shares, primarily because brand-names are important in these industries. The fact that bidi-workers are organized may be partly responsible for the relatively higher share of home workers in bidi, compared to their share in the other two product groups.

In two (of three) sectors, in over nine out of ten cases there are no delays in payment; but in one sector (zardoshi) there are delays in nearly 4 out of 10 cases. The survey finds that hbw-ers tend to remain with the same contractor, even in the absence of written agreements or benefit payments. The inertia in seeking alternatives is accounted for by the high opportunity costs of change (i.e., lack of alternative or excess supply of labour), debt bondage, delayed payments, and contractors preferring to keep workers isolated.

In *Pakistan* (as in India), the value chain analysis suggests that the heavy reliance of home-workers on the subcontractors limits their earnings. In *Pakistan* for incence sticks (a sector in common with India), the hbw household gets Rs 5 for making 1000 agarbathis; the retailer sells one thousand agarbathis for Rs. 6000. In other words, the worker gets 0.06 per cent of what a consumer pays. For carpets, the hbw-er apparently earns 18 per cent of what the final consumer pays for one square foot of carpet. In prawn peeling, it appears that a home based worker's share is 2.5 per cent of what a consumer pays in the domestic market.

A third of the women felt that the contractors engaged in malpractices – even though they usually came from the same community or neighbourhood. They supplied poor quality materials, miscounted, measured wrongly or arbi-

trarily rejected products. Only 12 per cent of the women had written contracts. It was still interesting that 47 per cent of the women's response was that they had a good working relationship with the contractor, 30 per cent felt that it was indifferent and only 23 per cent thought it was bad.

In *Indonesia* no value chain analysis, involving the price mark-ups at various stages of the chain, was carried out. However, relations between the hbwer and the contractor were analysed. Over 90 per cent of the batik workers stated that their arrangements with their contractors are either oral or they made no special arrangements; among home based potters between 80 and 90 per cent claimed the same. Three-quarters of the hbw-ers in the rattan industry also claimed the same. In the villages of the case studies, home-workers and their contractors were usually relatives or neighbours – a situation that prevailed in the South Asian sectors as well.

The case studies found that by and large home workers maintain ties with mainly one contractor. They did find, however, that in rattan and pottery sectors it is possible to work for two employers (though less so in batik). The contractors usually use the intermediaries/subcontractors to maintain close ties with the workers; thus a regular link with a contractor is the norm. As regards delays in payment, almost all workers seemed to be paid in full in the batik and rattan sectors; in pottery three-quarters said they were paid in full, while a quarter noted delays in the last payment.

In *Thailand* in saa paper making, the hbw-er may be receiving some 20 per cent of what the consumer pays for a product (e.g. small notebook) in a low-end market (e.g. flea market), but only 5 per cent of the consumer price in a high-end market (e.g. for foreign tourists).

As in India and Pakistan, most contracts between workers and subcontractors/contractors are not formal in two of the three products – saa paper and leather. The home worker and subcontractors are often neighbours and acquaintances (or even kin), and work relations are based on mutual trust. In hybrid seeds, however, where seed companies are involved, a written contract is common between farmers and seed companies. The latter specify the terms and conditions of contracted farming and the quality of seeds which farmers have to deliver as a final product. It is important here – in the context of the ILO Convention on hbw – that the contract states that seed companies are buyers and not employers; that farmers are sellers and not employees, and that companies are not bound by labour protection laws in this arrangement. However, by and large the seed farmers (home-workers) are paid on a piece-rate – by kilogram of seed. In all three sectors, about a quarter of workers interviewed stated that there were delays in payments received for work performed.

The leather work involving subcontracting includes leather shoes and bags; since these are fashion products, mass production of a few designs is a risk-prone strategy in a fashion conscious market characterised by shifting demand. Manufacturers usually do the cutting and patterning work themselves, while the

human skills required entail subcontracting sewing work to hbw-ers. Thai female workers are generally skillful sewers able to do refined craft work and the wage is lower than in neighbouring countries (e.g. Hongkong, Taiwan, Malaysia, Singapore, Korea). But Thailand cannot compete with these countries in terms of leather craft design. Hence, the industry must accept orders from brand-name companies and produce under license. Many brand-name leather products – Pierre Cardin, Gucci, Tiptop, Jacob – are mainly produced in Thailand.[33]

Home workers in *The Philippines* are paid on a piece rate basis or on the basis of the activity performed. In the home décor sector, workers are paid by piece produced including Christmas balls, lights and/or metal craft. In the okra sector a home worker responsible for plowing earns P.300 per day while a home worker in charge of applying fertiliser earns P.100 per day. As in the other countries, workers receive a negligible share of the final price of the product. For example in the pyrotechnic sector while distributors earn almost 50 per cent of profit of the final price, home workers receive 4 per cent of the final price.

The nature of the relationship between home workers in The Philippines is mainly based on patronage and kinship ties. In some cases this favoured home workers with special treatment and provision of benefits. For example in the fashion accessories sector, thanks to kinship ties, home workers had access to a credit line. Nonetheless, there were also cases in which the relationship between subcontractors and workers was a purely business agreement. This was very common in the home décor sector and in the case of migrant workers in pyrotechnics production.

In the relationship between the contractor and the hbw-er, several types of forms of control emerged in the studies, which account for the stability of the relationship between parties which have no formal written contract. One was the fact that both belonged to the same community, and were often neighbours, if not kin. Two, in Thailand, the hybrid seed producing families had a 'coordinator family', which was one of the seed-producing families. But it did not seem as though this family was in a conflictual relationship with the rest of the families; the role was essentially liaising between the producer households and the contractor. Three, in India (and in Pakistan), debt bondage seemed to be a means of maintaining control by contractors over the workers – so that the latter do not switch between contractors. If the contractor is the only available source of credit, the earnings from hbw are used as a form of repayment. There is a fourth, more insidious form of control, which in some ways is intrinsic to the way the subcontracting is organized. The provision of raw materials at home and the collection of the output by the subcontractor, often claimed by the home-worker as an advantage of home based work, also, however, precludes the

33 Three groups of leather workers were selected: i) individual family home-workers in slum communities around Bangkok; ii) home-workers as organized groups with support from government agencies (in Pathumthani province); and iii) small unregistered factory doing subcontracted work (with workers paid by the month).

development of inter-worker relations, blunts the prospects of unionization, ensures ignorance of the market, and keeps workers from diversifying sources of work. Policy has to take into account this stability of the relationship on the one hand, while trying to minimise its exploitative elements (low piece-rates, the low share in value, delayed payments, and physical abuse in certain cases).

6. The Social and Economic Profile of the Households

Household assets are an indicator of the household's social and economic level. Survey results showed that overall the social and economic level of hbw households was lower than the CG households. A first feature that can be highlighted is that the per capita monthly expenditure is higher for the CG households compared to hbw households in all countries (Table 5). In addition, the lower

Table 5: *Characteristics of the household surveyed*

	HBW Households				Non-HBW Households			
	Av. hh size	number of children	Per/cap. monthly hh expenditure	Share of hh exp. on food >75%	Av. hh size	number of children	Per/cap. monthly hh expenditure	Share of hh exp. on food >75%
INDIA								
Incense stick making	4.8	1.9	389.1	34.0	4.5	1.9	393.2	17.0
Bidi (MP)	4.7	1.5	510.5	45.2	4.5	0.8	478.0	29.2
Bidi (TN)	4.9	1.6	278.4	77.1	4.3	0.7	520.3	31.8
Zardosi	5.9	2.0	237.6	54.0	4.8	1.7	237.3	63.5
All	5.2	1.8	331.5	49.3	4.6	1.4	369.9	37.9
PAKISTAN								
Incense stick making	7.6	4.5	546.9	45.7	5.9	3.1	657.2	55.6
Carpet weaving	7.3	4.8	551.7	54.5	6.1	3.6	734.4	50.0
Sack stitching	8.5	4.1	602.4	66.2	6.7	3.7	757.6	52.4
Prawn peeling	6.9	4.5	629.8	40.5	7.2	3.8	662.9	21.7
All	7.6	4.5	580.0	51.9	6.5	3.6	703.9	43.9
INDONESIA								
Pottery	5.1	1.8	76777.8	44.3	5.1	2.3	76562.1	43.3
Rattan	6.3	2.3	51210.0	74.3	5.7	2.0	58792.4	56.7
Batik	5.2	2.2	50019.1	28.6	5.2	1.9	68907.1	16.7
All	5.5	2.1	58743.1	49.0	5.3	2.1	67741.3	38.9
PHILIPPINES								
Home décor	5.9	2.5	1043.5	_	5.9	2.2	_	_
Pyrotechnics	6.8	2.7	446.8	_	5.6	2.4	_	_
Okra	6.8	3.2	97.2	_	6.0	2.5	_	_
Fashion accessories	5.0	2.2	405.6	_	4.8	2.4	_	_
All	6.1	2.6	527.4	_	5.9	2.4	_	_
THAILAND								
Paper products	4.0	0.8	1185.4	_	3.6	0.5	1590.8	_
Leather Crafts	3.7	0.8	2179.2	_	3.9	0.9	2012.6	_
Hybrid seeds production	4.1	1.1	1027.1	_	4.3	1.1	1031.6	_
All	3.9	0.9	1445.4	_	3.9	0.9	1559.5	_

Note: The per capita monthly expenditures are expressed in local currency.
Source: UNICEF survey

socio-economic level of hbw households is reflected in the larger proportion of hbw households that devote more than 75 per cent of household expenditure to food compared to the share of CG households.

Survey results highlighted important differences in terms of socio-economic level of hbw households between South Asia and South East Asia. In South Asia hbw is a survival activity to stave off destitution. This is reflected in the higher share of households living below the poverty line compared to CG households and recorded national level. In India, more hbw households are below the poverty line than the average for the population of that state.[34] The same trend is present in Pakistan where 60 per cent of hbw households were living below the poverty line, which is higher than the percentage of CG households (45 per cent) and the percentage of households recorded as poor in urban Sindh (in 1996-7).

In South East Asia, the higher social and economic level of hbw households is reflected in the income level of hbw households that is often above the poverty line. In Indonesia this was the case for hbw households in two of three sectors (rattan, pottery), even though the level of income is slightly above the poverty line. Similarly, in Thailand, one of three sectors (leather) and in the Philippines one of four sectors (home décor) have an income level well above the national and regional poverty lines. These findings suggest that hbw – as well as other informal sector activities such as micro enterprises – can be a defense strategy against poverty and vulnerability, as well as a source of income diversification.

The importance of the income generated by hbw activities would depend on the degree of diversification of family income. The hbw income in a household involved in hbw can be a primary source of income or a secondary source depending on the characteristics of the family in the sector. In most countries hbw appears to be a secondary source of income. For instance, in India, on average across the three sectors, just over a third of all income in hbw households comes from home based work. Nonetheless by looking at the distinction between rural and urban areas, we found that in the zardosi and bidi sectors, hbw accounted for more than half of the household income.[35] In Thailand this share increases to 61 per cent and in hybrid seeds sector to 80 per cent; in other words, it is definitely a primary source of income here.

The average size of the household is another important characteristic (Table 5). The average size of household members is very high in Pakistan (7.6 members). In the Philippines it is 6.1, followed by Indonesia 5.5, and India 5.2, while it is much lower for Thailand (under 4 members). The countries are

34 The exception is agarbathi makers in rural areas, who happen to be located near the large industrial city of Bangalore, where wage employment is better paid, so the men-folk have been able to find better employment, thus increasing the hbw household's total family income.

35 In urban areas, hbw accounted for 54 per cent of the household income among zardosi workers and for 70 per cent of the income among bidi workers in Tamil Nadu.

in the same rank order if ranked by the number of children per household. The demographic transition is at different stages in the five countries and this has important implications since it can influence child participation in hbw activities. In general the CG households are smaller in size.

The house represents an important asset for hbw households. Indeed the majority of hbw households own their house. This was the case for 85 per cent of hbw households in Indonesia, 71 per cent in India and close to 70 per cent in Pakistan (Table 6). Given the dual function of the house (home as well as place of work), the physical conditions as well as access to basic services have a double importance. Table 7 presents the conditions/type of the house by country. The type of the house varies accordingly to the rural/urban location. In India although houses are in poor condition more than 50 per cent have walls made of bricks/wood and another significant share are of cement. The roof is mainly made with wood, tiles or stones, or terraced with cement slabs. In Pakistan, the houses are mainly made with mud and bricks (i.e. kutcha/pukka). In Indonesia the walls are of bricks and the roofs made mainly with tiles. In Thailand the walls are of bricks (especially in urban areas) and wood (especially in rural areas) while the roof may be made of corrugated iron sheets or tiles.

From the subcontractor's point of view, hbw is advantageous as it saves the costs of space and of other production inputs such as electricity and water. From the home worker's point of view, hbw enables women to work and generate income while continuing to devote at least part of their time to home activities. However, what is an advantage for the contractor can be a disadvantage for the home dwellers. First, the involvement of women in hbw limits the time to look after children. Second, hbw activity reduces considerably the avail-

Table 6: *Ownership of the house in home based work households (per cent)*

	Yes	No	Total
INDIA			
Incense stick making	60.6	39.4	100.0
Bidi (MP)	62.3	37.7	100.0
Bidi (TN)	81.3	18.7	100.0
Zardosi	81.8	18.2	100.0
All	71.2	28.8	100.0
PAKISTAN			
Incense stick making	74.0	26.0	100.0
Carpet weaving	71.4	28.6	100.0
Sack stitching	82.7	17.3	100.0
Prawn peeling	50.0	50.0	100.0
All	69.6	30.4	100.0
INDONESIA			
Pottery	88.6	11.4	100.0
Rattan	78.6	21.4	100.0
Batik	90.0	10.0	100.0
All	85.7	14.3	100.0

Source: UNICEF survey

Table 7: *Type of home by wall and roof materials - home based households - (per cent)*

	Type of wall						Type of roof			
INDIA	Mud	Wood stone brick	Cement	Other	Total		Thatch	Wood tiles stones	Terraced or cement slabs	Total
Incense stick	9.0	49.0	28.4	13.5	100.0	Incense stick	20.6	16.1	63.2	100.0
Bidi (MP)	14.3	46.8	37.7	1.3	100.0	Bidi (MP)	0.0	81.8	18.2	100.0
Bidi (TN)	37.3	40.0	22.7	0.0	100.0	Bidi (TN)	57.3	21.3	21.3	100.0
Zardosi	16.2	76.4	6.1	1.4	100.0	Zardosi	10.8	53.4	35.8	100.0
All	16.9	56.0	21.8	5.3	100.0	*All*	20.0	40.2	39.8	100.0

PAKISTAN	Mud	Brick	Mud and brick	Total
Incense stick	9.1	32.5	58.4	100.0
Carpet weaving	32.5	20.8	46.8	100.0
Sack stitching	0.0	46.7	53.3	100.0
Prawn peeling	14.9	6.8	78.4	100.0
All	14.2	26.7	59.1	100.0

INDONESIA	Brick	Wood	Bamboo	Total		Concrete	Wood	Tiles	Zinc	Other	Total
Pottery	78.6	1.4	20.0	100.0	Pottery	0.0	0.0	98.6	1.4	0.0	100.0
Rattan	97.1	0.0	2.9	100.0	Rattan	0.0	1.4	82.9	2.9	12.9	100.0
Batik	75.7	1.4	22.9	100.0	Batik	1.4	0.0	98.6	0.0	0.0	100.0
All	83.8	1.0	15.2	100.0	*All*	0.5	0.5	93.3	1.4	4.3	100.0

THAILAND	Brick	Wood	Bamboo and wood	Brick and wood	Total		Corrugated iron sheets	Tile	Corrugated iron sheets and thatch	Total
Paper products	24.5	55.9	0.0	19.6	100.0	Paper products	62.4	37.6	0.0	100.0
Leather crafts	77.5	15.7	1.0	5.9	100.0	Leather crafts	12.7	86.3	1.0	100.0
Hybrid seed production	19.8	47.5	0.0	32.7	100.0	Hybrid seed production	94.1	5.0	1.0	100.0
All	40.7	39.7	0.3	19.3	100.0	*All*	56.3	43.1	0.7	100.0

Source: UNICEF survey

ability of space and worsens the already poor conditions of the house. And third, the use of toxic materials affects the home environment. This can cause deterioration in the health of adults and children in the household even if they are not involved directly in the production activity.

The provision of services contributes to the level of welfare of the family, and in the case of home work households, often to the income generating activity. The type of services available in hbw households depends on location (piped water in urban areas and wells in rural areas). In general the services are much higher in South East Asian countries compared to the countries of South Asia.

Electricity is quite widely diffused in the houses of home workers. This is not surprising since home workers' production is often connected to the availability of light in the place of work (Table 8). The share of hbw households with electricity is extremely high in Thailand and Indonesia. Pakistan and India also have a high share of houses reached by electricity.

For water facilities the situation is less homogenous, and depends on the

Table 8: *Electricity in home based households (per cent)*

	Yes	No	Total
INDIA			
Incense stick making	69.7	30.3	100.0
Bidi (MP)	92.2	7.8	100.0
Bidi (TN)	68.0	32.0	100.0
Zardosi	85.1	14.9	100.0
All	78.2	21.8	100.0
PAKISTAN			
Incense stick making	85.7	14.3	100.0
Carpet weaving	84.4	15.6	100.0
Sack stitching	98.7	1.3	100.0
Prawn peeling	67.6	32.4	100.0
All	84.2	15.8	100.0
INDONESIA			
Pottery	98.6	1.4	100.0
Rattan	91.4	8.6	100.0
Batik	98.6	1.4	100.0
All	96.2	3.8	100.0
THAILAND			
Paper products	99.2	0.8	100.0
Leather crafts	99.3	0.7	100.0
Hybrid seeds production	100.0	0.0	100.0
All	99.5	0.5	100.0

Source: UNICEF survey

location (urban or rural) (Table 9). In India most of the houses (60 per cent) have piped water outside the house. In urban areas, households tend to also have water inside the house. In rural areas the problem is larger. Water facilities in the house or close to the house reduce the time needed to fetch the quantity of water necessary for drinking and cooking. This is a household chore typically performed by children, usually girls, and women. In Pakistan, in the households surveyed the source of water differs for different slums; only two of them are reached by water and the households have a tap inside. In the other two they have to buy the water from a vendor. In Indonesia the water comes mainly from wells, while in Thailand piped water is very common (83 per cent).

The availability of toilet facilities varies among countries and by urban/rural location (Table 10). The urban areas tend to have more facilities. For instance, in Pakistan, more than 90 per cent of the households surveyed in the slums have a toilet facility inside the house (nearly 60 per cent of which have a septic tank, the rest have flushing water). The share is high also in the urban areas of the other countries.

It is also interesting to examine possession of durable goods (see Table 11, page 41). This is another dimension of poverty, since the absence of durable goods underlines the low potential demand of these families. The general results thus again indicate a higher ownership of durable goods in the South East Asian countries.

Table 9: *Source of water in home based households (per cent)*

INDIA

	Pipe outside the house	Pipe inside the house	Handpumps	Dug well	Tank/ truck	Ponds	Other	Total
Incense stick making	67.1	7.1	15.5	0.0	9.7	0.6	0.0	100.0
Bidi (MP)	57.1	37.7	1.3	0.0	0.0	2.6	1.3	100.0
Bidi (TN)	96.0	2.7	0.0	1.3	0.0	0.0	0.0	100.0
Zardosi	42.6	37.8	17.6	1.4	0.0	0.7	0.0	100.0
All	62.2	21.5	11.2	0.7	3.3	0.9	0.2	100.0

PAKISTAN*

	Tap in the household	Neighbourhood pump	Purchased from supplier	Other	Total
Incense stick making	70.1	19.5	3.9	6.5	100.0
Carpet weaving	7.8	2.6	88.3	1.3	100.0
Sack stitching	73.3	26.7	0.0	0.0	100.0
Prawn peeling	1.4	0.0	98.6	0.0	100.0
All	38.3	12.2	47.5	2.0	100.0

INDONESIA

	Piped	Pump	Protected well	Unprotected well	Protected spring	Unprotected spring	Others	Total
Pottery	0.0	11.4	70.0	17.1	0.0	1.4	0.0	100.0
Rattan	0.0	1.4	41.4	55.7	0.0	0.0	1.4	100.0
Batik	4.3	17.1	58.6	11.4	7.1	1.4	0.0	100.0
All	1.4	10.0	56.7	28.1	2.4	1.0	0.5	100.0

THAILAND

	Piped water	Water from artesian well	Buy water from other sources	Rain and piped water	Total
Paper products	92.4	6.8	0.0	0.8	100.0
Leather crafts	91.2	5.9	2.2	0.7	100.0
Hybrid seeds production	65.6	34.4	0.0	0.0	100.0
All	83.2	15.5	0.8	0.5	100.0

* Main source for drinking water

Source: UNICEF survey

If nearly 60 per cent of the hbw households in Indonesia and Thailand have a radio the share drops to 19 per cent in India and 9 per cent in Pakistan. The possession of a refrigerator is much rarer in all countries. In Pakistan only 1 per cent of the households have a refrigerator, in India 1.6 per cent and in Indonesia 3 per cent. Not surprisingly, 77 per cent of the hbw households surveyed in Thailand have a refrigerator. This is a sign that such kind of activities can generate a level of income which pushes the family above the poverty line and possibly beyond a state of vulnerability. The presence of a TV in the house is very high in Thailand (93 per cent) and high in Indonesia (60 per cent). However, also in India and Pakistan, considering the level of poverty, the share is quite high in some sectors, underlining that a TV is a popular durable good and a status symbol.

Table 10: *Toilet facilities in home based households (per cent)*

	Yes	No	Total
INDIA			
Incense stick making	39.4	60.6	100.0
Bidi (MP)	71.4	28.6	100.0
Bidi (TN)	17.3	82.7	100.0
Zardosi	90.5	9.5	100.0
All	57.8	42.2	100.0
PAKISTAN			
Incense stick making	97.4	2.6	100.0
Carpet weaving	96.1	3.9	100.0
Sack stitching	100.0	0.0	100.0
Prawn peeling	77.0	23.0	100.0
All	92.7	7.3	100.0
INDONESIA			
Pottery	60.0	40.0	100.0
Rattan	78.6	21.4	100.0
Batik	42.9	57.1	100.0
All	60.5	39.5	100.0
THAILAND			
Paper products	54.9	45.1	100.0
Leather crafts	88.5	11.5	100.0
Hybrid seeds production	44.2	55.8	100.0
All	65.2	34.8	100.0

Source: UNICEF survey

Finally, the ownership of a means of transport follows the same pattern. The share is high in Thailand and in Indonesia and very low in Pakistan. Bicycles, for instance, are present in more than 50 per cent of the Indonesian households surveyed, and in 45 per cent in Thailand and 42 per cent in India, while only 5.3 per cent of the hbw households in Pakistan own a bike.

7. Women Home Based Workers

In view of the two synergies mentioned in Section 1, women at household or micro level have a double role (or burden) in household human development. Women's contribution to the first synergy within the household is fundamental. For instance, we specified earlier how the education of a girl-child not only makes her an agent of her own well-being, but also that of her entire family. Furthermore, the education of a girl also equips her to take on a non-agricultural economic activity, where productivity is greater than in agriculture.[36] Women's contribution to the second synergy is evident with their participation

36 Elsewhere, we have demonstrated that in developing countries that achieved high health and education indicators even at low levels of income, women not only achieved parity in education levels early, but also had high participation rates in the labour force. In other words, women were agents of change in terms of both our synergies. See Mehrotra (1997) for a further discussion.

Table 11: *Durable goods in home based households (per cent)*

	Radio		Refrigerator		TV		Gas stove		Bicycle		Motorcycle		Cars/Jeeps/Van	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
INDIA														
Incense stick making	15.6	84.4	0.0	100.0	38.3	61.7	_	_	18.2	81.8	3.9	96.1	0.6	99.4
Bidi (MP)	6.6	93.4	5.2	94.8	84.4	15.6	_	_	72.7	27.3	11.7	88.3	1.3	98.7
Bidi (TN)	20.0	80.0	3.0	97.0	23.9	76.1	_	_	55.1	44.9	1.4	98.6	0.0	100.0
Zardosi	28.4	71.6	0.7	99.3	41.9	58.1	_	_	45.6	54.4	0.0	100.0	0.0	100.0
All	19.0	81.0	1.6	98.4	45.1	54.9	_	_	42.3	57.7	3.6	96.4	0.4	99.6
PAKISTAN														
Incense stick making	13.0	87.0	0.0	100.0	27.3	72.7	_	_	1.3	98.7	0.0	100.0	0.0	100.0
Carpet weaving	6.5	93.5	0.0	100.0	10.4	89.6	_	_	2.6	97.4	0.0	100.0	0.0	100.0
Sack stitching	12.0	88.0	2.7	97.3	52.0	48.0	_	_	16.0	84.0	1.3	98.7	2.7	97.3
Prawn peeling	5.4	94.6	1.4	98.6	13.5	86.5	_	_	1.4	98.6	0.0	100.0	1.4	98.6
All	9.2	90.8	1.0	99.0	25.7	74.3	_	_	5.3	94.7	0.3	99.7	1.0	99.0
INDONESIA*														
Pottery	61.4	38.6	5.7	94.3	64.3	35.7	100.0	0.0	18.6	81.4	1.4	98.6	0.0	100.0
Rattan	54.3	45.7	2.9	97.1	67.1	32.9	82.9	17.1	57.1	42.9	17.1	82.9	0.0	100.0
Batik	58.6	41.4	0.0	100.0	48.6	51.4	94.3	5.7	78.6	21.4	7.1	92.9	0.0	100.0
All	58.1	41.9	2.9	97.1	60.0	40.0	92.4	7.6	51.4	48.6	8.6	91.4	0.0	100.0
THAILAND														
Paper products	60.6	39.4	83.3	16.7	95.5	4.5	86.4	13.6	43.9	56.1	_	_	_	_
Leather crafts	69.9	30.1	82.4	17.6	87.5	12.5	80.9	19.1	24.3	75.7	_	_	_	_
Hybrid seeds production	48.9	51.1	67.9	32.1	96.9	3.1	66.4	33.6	66.4	33.6	_	_	_	_
All	59.9	40.1	77.9	22.1	93.2	6.8	77.9	22.1	44.6	55.4	_	_	_	_

Source: UNICEF survey

*Note: * In Indonesia ownership of means of transport also included boats and motorized boats.*

to hbw income-generating activities, and from the fact that the informal sector accounts for a predominant share of the total labour force, which is increasingly becoming feminised.

In this section, in order to understand better the main social and economic characteristics of women in hbw households, we analyse their participation in the labour force (in particular hbw) and the intensity of this participation (looking at the hours worked per day). Given the importance of the first synergy, we also analyse their human endowment in terms of their education level and health status. Where data permits, the information on women in hbw households is compared with women in the CG, and at national level (using World Bank World Development Indicators Data). Finally we are going to consider the women home workers' opinions about the problems encountered and the priorities regarding their job.

As is well known, in official statistics a large proportion of women workers are not accounted for. The main reason is that women tend to be engaged in informal sector activities and thus are 'invisible' workers (also in terms of GDP or income generated). In the five countries studied the female labour force recorded is quite low, with an even lower rate of participation in South Asia (Table 12).

In other words, as underlined by many surveys and studies, female participation in the work force would be much higher if the informal sector were included. It is in the informal sector that female workers are prevalent. In particular, from the UNICEF survey (Table 13) the 'invisible' becomes clearly 'visible' showing women as workers in hbw households also in terms of income generated. For instance in the surveys in hbw households the workers are mainly female. In hbw in India the share is between 47 and 61 per cent varying by sector, while in Indonesia from 48 to 53 per cent (and both are higher than for the relevant control group); a similar range is found in Philippines sectors (42 to 48 per cent). Certainly, women's rate of participation in the labour force in hbw households is much higher than the female share of the total labour force in the country (see col.1, Table 12). It is also interesting to note from a

Table 12: *Socio-economic indicators for women (1999)*

	Labour force, female (% of total labour force)	Labour force activity rate, female (% of female population ages 15-64)	Illiteracy rate, adult female (% of females age 15 and above)	Fertility rate, poorest quintile (births per woman)
INDIA	32.2	29.4	45.0*	4.1
PAKISTAN	28.1	21.7	70.0	5.1
INDONESIA	40.6	38.9	18.7	3.3
PHILIPPINES	37.7	31.9	5.1	6.5
THAILAND	46.3	55.8	6.5	-

Source: World Bank, World Development Indicators (2001)
*Data refers to India Census (2002).

Table 13: *Share of women working in hbw households by sector and in non-hbw households (control group)*

	HBW Households								Non-HBW Households				
	Total workers	Total women	Women working	Women working in hbw	Women working as % of total workers	Women working as % of total women	Women working in hbw as % of women	Women working in hbw as % of women working	Total workers	Total women	Women working	Women working as % of total workers	Women working as % of total women
INDIA													
Incense stick making	369	215	181	166	49.1	84.2	77.2	91.7	72	65	18	25.0	27.7
Bidi (MP+TN)	437	231	209	204	47.8	90.5	88.3	97.6	86	86	20	23.3	23.3
Bidi (MP)	222	117	111	107	50.0	94.9	91.5	96.4	47	46	15	31.9	32.6
Bidi (TN)	215	114	100	97	46.5	87.7	85.1	97.0	39	40	5	12.8	12.5
Zardosi	457	357	282	274	61.7	79.0	76.8	97.2	84	67	12	14.3	17.9
All	1263	803	672	644	53.2	83.7	80.2	95.8	242	218	50	20.7	22.9
PAKISTAN*													
Incense stick making	_	124	_	99	_	_	79.8	_	_	22	_	_	_
Carpet weaving	_	102	_	88	_	_	86.3	_	_	22	_	_	_
Sack stitching	_	183	_	153	_	_	83.6	_	_	25	_	_	_
Prawn peeling	_	93	_	87	_	_	93.5	_	_	25	_	_	_
All	_	502	_	427	_	_	85.1	_	_	94	_	_	_
INDONESIA													
Pottery	203	120	97	83	47.8	80.8	69.2	85.6	59	38	21	35.6	55.3
Rattan	221	141	115	103	52.0	81.6	73.0	89.6	62	54	21	33.9	38.9
Batik	174	109	93	83	53.4	85.3	76.1	89.2	72	43	33	45.8	76.7
All	598	370	305	269	51.0	82.4	72.7	88.2	193	135	75	38.9	55.6
PHILIPPINES													
Home décor	146	74	65	54	44.5	87.8	73.0	83.1	19	15	10	52.6	66.7
Pyrotechnics	98	52	42	40	42.9	80.8	76.9	95.2	16	10	9	56.3	90.0
Okra	106	49	44	39	41.5	89.8	79.6	88.6	22	13	9	40.9	69.2
Fashion accessories	87	61	42	39	48.3	68.9	63.9	92.9	33	22	12	36.4	54.5
All	437	236	193	172	44.2	81.8	72.9	89.1	90	60	40	44.4	66.7
THAILAND													
Paper products	253	_	_	_	_	_	_	_	65	_	_	_	_
Leather Crafts	233	_	_	_	_	_	_	_	72	_	_	_	_
Hybrid seeds production	221	_	_	_	_	_	_	_	64	_	_	_	_
All	707	_	_	_	_	_	_	_	201	_	_	_	_

Note: women here refers to all females equal to, or greater than, 15 years old; for Thailand the data refeers to all adults equal to, or greater than, 18 years old;
Source: UNICEF survey

methodological point of view, that the CG in the three countries (India, Indonesia, the Philippines) mentioned above have a similar rate of participation to the one reported in the WDI data set.

The feminisation of hbw activities is clear if we compare Tables 12 and 13. The share of working women in total females is very impressive in all countries. In India, in home workers households 84 per cent of females work (as a percentage of all women 15 years or older) of which 96 per cent are involved in a hbw activity. The control group, or non-hbw households, recorded a much lower share of working women in each sub-sector. In sectors in Indonesia and the Philippines again the total share of women working in hbw households is high, over 80 per cent, of which more than 88 per cent are involved in hbw. As in India, the share of the working women on total women is lower for the CG households in these countries.

The feminisation of work has important implications for the gender dimension of a household's human development cycle from generation to generation. Often in income generating activities male children tend to follow in the father's footsteps, while the female children those of the mother. Since hbw is mainly a female activity girl-children are more involved in helping their mother, as confirmed by the surveys. The share of daughters involved in the sector depends also on the type of product, and social norms that shape the institutional framework. In some specific sectors daughters account for 90 per cent of the household members who help women in hbw.

Moreover, full time hbw has two main consequences for women: one is that they are unable to spend as much time with the children as before, affecting their caring capabilities. Thus, 71 per cent of Pakistani women home workers interviewed said that they are unable to take care of their children as well as before they did hbw. The second is that the older girls in the family are the ones who start to undertake the care responsibilities of the child, consequently affecting their own schooling.

In order to generate higher incomes in South East Asia, the women work long hours – just as in India and Pakistan. The hours worked by women in hbw vary according to season and if the hbw activity is a primary or a secondary source of income. On average, almost nine hours a day were worked during the peak season (Table 14). One sector surveyed (zardosi) is affected by sharp seasonality in demand, where in the lean season working hours may fall to just over 5 hours per day. In Pakistan, hours worked per day were in the range of 6.6 to 7.6 hours. In Thailand too, hours worked were reasonably high: between 8 (hybrid seeds) and 10 hours (leather crafts). In the Philippines the hours per day reach 18 in three or four sectors, but can vary considerably for reasons of seasonality. Thus, in some sub-sectors the hours worked per day and per week are very high considering the other household chores of women. For instance, in Thailand most of the women seem to be working seven days a week. What we get here is a pattern of work that suggests that these are full-time, rather

than part-time workers. Yet they have none of the benefits that full-time workers in the formal sector enjoy. It is often the seasonality of the work which determines their status as part-time workers.

The educational level of women is of extreme importance for both synergies to be triggered at the household level. Although there are major differences among countries, the education level of home workers is much higher in South

Table 14: *Average hours worked in hbw by women*

INDIA

	Per day Peak season	Per day Lean season
Incense stick making	7.8	5.9
Bidi (MP)	9.8	-
Bidi (TN)	10.6	7.0
Zardosi	8.4	5.3
All	8.7	4.6

PAKISTAN

	Per day
Incense stick making	7.6
Carpet weaving	6.9
Sack stitching	6.6
Prawn peeling	6.7
All	7.0

INDONESIA*

	Per day
Pottery	5.3
Rattan	5.4
Batik	5.0
All	5.2

PHILIPPINES

	Per day	Per day Peak season	Per day Lean season
Home décor	15.0	18.0	3-6
Pyrotechnics	-	18.0	6
Okra	8.0	10.0	1-3
Fashion accessories	15.0	18.0	3-6

Source: UNICEF. Focus Group Discussions

THAILAND

	Per day	% hbw working seven days
Paper product	9.1	78.4
Leather crafts	9.9	34.3
Hybrid seeds	8.7	95.0
All	9.2	69.2

Note: Women here refers to all females 15 years old or more.

*Considering 6 days a week

Source: UNICEF survey

Table 15: *Educational level of women home-based hh (per cent)*

INDIA

	HBW Households								Non-HBW Households							
	No or less than primary	No school	From 1 to 5	From 6 to 8	From 9 to 12	Over 13	Total	At least primary education		No or less than primary	No school	From 1 to 5	From 6 to 8	From 9 to 12	Over 13	Total	At least primary education
Incense stick	68.4	59.1	15.8	13.0	12.1	0.0	100.0	31.6	Incense stick	52.3	40.0	16.9	20.0	21.5	1.5	100.0	47.7
Bidi (MP)	43.6	35.0	22.2	26.5	15.4	0.9	100.0	56.4	Bidi (MP)	43.5	37.0	21.7	37.0	4.3	0.0	100.0	56.5
Bidi (TN)	55.3	43.0	23.7	12.3	21.1	0.0	100.0	44.7	Bidi (TN)	10.0	7.5	12.5	22.5	40.0	17.5	100.0	90.0
Zardosi	78.4	76.5	8.1	9.8	5.6	0.0	100.0	21.6	Zardosi	82.1	79.1	10.4	4.5	6.0	0.0	100.0	17.9
All	67.4	61.0	14.4	13.4	11.0	0.1	100.0	32.6	*All*	51.8	45.4	15.1	19.3	16.5	3.7	100.0	48.2

PAKISTAN

	No education	Yes some education	Total
Incense stick	93.5	6.5	100.0
Carpet weaving	98.7	1.3	100.0
Sack stitching	86.7	13.3	100.0
Prawn peeling	97.3	2.7	100.0

INDONESIA

	HBW Households							Non-HBW Households						
	No or less than primary	Primary school	Junior high school	Senior high school	Academy university	Total	At least primary education		No or less than primary	Primary school	Junior high school	Senior high school	Total	At least primary education
Pottery	5.0	60.8	23.3	10.8	0.0	100.0	95.0	Pottery	7.9	57.9	18.4	15.8	100.0	92.1
Rattan	16.3	59.6	18.4	5.0	0.7	100.0	83.7	Rattan	13.0	55.6	13.0	18.5	100.0	87.0
Batik	39.4	55.0	4.6	0.9	0.0	100.0	60.6	Batik	18.6	62.8	4.7	14.0	100.0	81.4
All	19.5	58.6	15.9	5.7	0.3	100.0	80.5	*All*	13.3	58.5	11.9	16.3	100.0	86.7

PHILIPPINES

	No school	Less than primary	Primary school	Completed secondary level and vocational	Completed tertiary level	Total	At least primary school
Home décor	0.0	18.1	44.4	37.5	0.0	100.0	81.9
Pyrotechnics	0.0	19.2	44.2	34.6	1.9	100.0	80.8
Okra	0.0	35.4	50.0	14.6	0.0	100.0	64.6
Fashion accessories	3.3	14.8	50.8	31.1	0.0	100.0	82.0
All	0.9	21.0	47.2	30.5	0.4	100.0	78.1

THAILAND

	HBW Households							Non-HBW Households						
	No school	Upper primary school	Lower secondary school	Upper secondary	Vocational	Total	At least primary school		No school	Upper primary school	Lower secondary school	Upper secondary	Vocational	Total
Paper products	1.0	79.2	12.5	5.2	2.1	100.0	99.0	Paper products	0.0	75.0	25.0	0.0	0.0	100.0
Leather craft	4.4	73.9	14.5	2.9	4.3	100.0	95.6	Leather craft	17.4	47.8	13.0	4.4	17.4	100.0
Hybrid seeds	0.0	98.6	1.4	0.0	0.0	100.0	100.0	Hybrid seeds	0.0	84.6	0.0	15.4	0.0	100.0
All	1.7	83.4	9.8	3.0	2.1	100.0	98.3	*All*	7.1	66.1	14.3	5.4	7.1	100.0

Note: Women here refers to all females, 15 years old or more
Source: UNICEF survey

East Asian countries. In South Asia the hbw women are often illiterate, and their education is lower than the CG in India (Table 15). Thus in India, half of the agarbathi makers, a third of bidi workers and over two thirds of zardoshi workers had no education at all. In Pakistan over 94 per cent of all home based workers had never attended school; the share was lower in the control group of women. In South East Asia the situation was quite different. In Indonesia over four-fifths of all home-workers had completed five years of primary school (61 per cent in batik, 84 per cent in rattan, and 95 per cent in pottery). In Thailand, for instance, only a small proportion of the female home based workers had no education. In the CG 27 per cent of the women have an education higher than primary, compared to 15 per cent of hbw women. In the Philippines 78 per cent of women have at least primary education. The hbw women are thus disadvantaged compared to other local women both in South Asia and in South East Asia.

Women working in hbw often suffer from personal health problems which are work-related (Table 16). Health problems undermine the two synergies by reducing women's capability to both work and take care of children. Furthermore, when the illness is due to hbw (e.g. toxic materials in incense sticks or pyrotechnics), all the family members are likely to be affected by their home environment, including children. There is evidence in the South Asian cases that women do not use health facilities. In hbw the share of women suffering from different health problems is much higher than in the CG.

In India across the three sectors studied, half of the women perceived that they experienced at least one work-related disability. In other words, about 48 per cent of women working in home based work reported health problems due to work. In all sectors some 30 to 71 per cent of the women working in hbw seemed to face hbw related health problems. Most women reported problems that were clearly home based work related – shoulder pain and backache were the most commonly cited problems. For example, the process of making incense sticks (in both India and Pakistan) is hazardous in several ways. Saw dust mixed with various colours and toxic chemicals is used to make a paste. The paste, normally handled with bare hands, leads to discolouring and injury to the skin. Workers inhaled the dust and toxins causing irritation in the upper respiratory tract that eventually resulted in asthma in many cases. In none of the cases was any kind of treatment resorted to, despite awareness of the health problem.[37]

Sudarshan et al. (2001) suggest that it may be difficult to improve the health status of the workers without a holistic approach to the problem. Sector-specific problems like shoulder pain in the case of zardoshi, blistering on

37 However, among the adult women workers, an important difference was observed in the health seeking behaviour of bidi workers and others. None of the incense stick makers, and less than 5 per cent of the zardoshi workers, either stopped work temporarily or permanently or even sought treatment. In contrast, over 40 per cent of bidi MP, and over 80 per cent of bidi TN workers, did so. This may again be linked to the availability of health facilities for bidi workers as part of the Welfare Fund facilities.

the palms because of rolling incense sticks and inhaling tobacco dust while rolling bidis resulting in bronchial problems, poor vision due to the toxic materials used in incense stick making, can often be eliminated by introducing innovative technology. For example, an improved frame or appropriate seat to minimise or prevent shoulder pain in the case of zardoshi, providing gloves to be worn while rolling the incense sticks, or a nasal filter to prevent bronchial problems are suggested. The issue is: who is to provide these, and how? Without some collective action by workers who organize themselves, neither public action nor any initiative by their employers is likely.

In Pakistan the urban slums where these communities lived were highly polluted and without adequate social/physical infrastructure. They suffered many ailments like respiratory diseases, pains in the muscles and joints, and serious skin irritations and allergies. In many cases, despite the health impact of the hazardous work, they did not seek any medical attention because of unaffordable or poor health facilities. Often they relied on traditional medicine or medicines that had expired, disbursed by unqualified persons. The proportion of hbw women currently suffering a disease/ailment is incredibly high. Nearly all the women working in hbw seemed to be ailing.

In South East Asia the impact of home based work on the health of women is less dramatic than in South Asian countries. For instance, in Indonesia and Philippines only a third of women suffer from health problems. A higher share is recorded in the hybrid seeds sector in Thailand and pyrotechnics in the Philippines.

We also collected information about the participation of women in associations or social networks (Table 17). Such membership is important to arrive at collective answers for common problems and for suggesting possible interventions to the government. In India, almost none of the incense-stick makers and zardoshi workers are members of an organization. Nearly a quarter of the bidi workers (TN) are members, while as much as three quarters of the bidi workers (MP) are members. In Pakistan hardly any home workers are members of an organization. Some of them have, however, participated in collective action to negotiate better piece rates. However, more than half the women in Pakistan are willing to participate in collective action.

In Indonesia, none of the sectors selected had a women's collective,[38] though some of them are involved in micro-finance schemes. In the Philippines and Thailand (where too the local network of Homenet is active), a significant proportion of workers were members of a women's collective – certainly a much higher proportion than home workers in India (with the exception of bidi MP) or Pakistan.

The women have a clear idea of the problems affecting their households and their hbw activities as well as the priorities for improving their welfare.

38 In Indonesia, home workers in other parts of the country are indeed members of the local network of Homenet International.

Table 16: *Women home based workers with health problems due to work (per cent)*

INDIA

	Watery eyes	Poor vision	Shoulder pain	Back pain	Indigestion	Swelling at the back of palms	Gynecological problems	Other
Incense stick	46.7	30.3	13.9	9.7	6.1	16.4	15.8	40.0
Bidi (MP)	1.1	12.1	12.1	58.2	58.2	9.9	1.1	6.6
Bidi (TN)	0.0	7.9	42.7	0.0	18.0	6.7	7.9	3.4
Zardosi	21.0	20.6	24.9	28.0	8.9	6.6	2.7	5.8

	At least one disability		
	No disability	At least one disability	Total
Incense stick	36.0	64.0	100.0
Bidi (MP)	28.9	71.1	100.0
Bidi (TN)	55.1	44.9	100.0
Zardosi	69.2	30.8	100.0
All	51.8	48.2	100.0

PAKISTAN

	General (fever, cold, etc)	Eye infection Itching	Ear infection	Watering eyes	Difficult to see Eye strain	Cough	Asthma	Skin problem	Breath-ing problem	Stiff neck	Back pains	Anemia	Pain in legs	Pain in some limb	Pain in joints	Swelling knees	Swelling in other parts of body	Pain in chest	Stomach pain	General body pains	Dizzy-ness nausea	Blisters	Skin cracking discolour-ing	Muscular pain	Exhaus-tion	Others (specify)
Incense stick	63.6	14.3	_	28.6	18.2	67.5	7.8	2.6	19.5	10.4	79.2	80.5	22.1	18.2	15.6	2.6	1.3	22.1	13.0	33.8	6,5	2,6	_	7,8	_	24,7
Carpet weaving	45.5	9.1	_	18.2	18.2	35.1	5.2	1.3	5.2	9.1	57.1	67.5	11.7	31.2	5.2	1.3	2.6	19.5	19.5	26.0	13,0	6,5	5,2	14,3	_	26,0
Sack stitching	33.3	8.0	4.0	18.7	17.3	36.0	2.7	1.3	22.7	1.3	61.3	30.7	9.3	5.3	5.3	_	2.7	18.7	12.0	22.7	10,7	1,3	1,3	_	14,7	22,7
Prawn peeling	48.6	8.1	_	12.2	8.1	31.1	2.7	31.1	5.4	1.4	47.3	6.8	6.8	10.8	5.4	1.4	_	8.1	6.8	23.0	9,5	33,8	35,1	1,4	14,9	35,1
All	47.9	9.9	1.0	19.5	15.5	42.6	4.6	8.9	13.2	5.6	61.4	46.9	12.5	16.5	7.9	1.3	1.7	17.2	12.9	26.4	9,9	10,9	10,2	5,9	7,3	27,1

PAKISTAN Do you complain of HBW related health problems?

	No	Yes	Total
Incense stick	0.0	100.0	100.0
Carpet weaving	7.8	92.2	100.0
Sack stitching	9.3	90.7	100.0
Prawn peeling	6.8	93.2	100.0
All	5.9	94.1	100.0

INDONESIA*

	General (fever, cold, etc.)	Eye infection	Ear infection	Skin problem	Breathing problem	Coughing	Stomach aches	Stiff neck	Back problem	Shoulder pain	Dizzy	Work accident	Other
Pottery	22,7	1,0	0,0	2,1	3,1	19,6	4,1	0,0	3,1	0,0	33,0	0,0	23,8
Rattan	26,1	0,9	0,0	1,7	0,9	9,6	7,0	1,7	4,3	0,9	33,9	0,0	47,6
Batik	31,2	2,2	0,0	1,1	1,1	8,6	6,5	0,0	0,0	0,0	38,7	1,1	18,2
All	26,6	1,3	0,0	1,6	1,6	12,5	5,9	0,7	2,6	0,3	35,1	0,3	28,0

PHILIPPINES

Have you become sick because of work?

	Blurring of eyes	Anemia	Dizziness	Allergy	Burned by chemicals	High blood pressure	Difficulty in urinating	Bladder problems	Asthma	Muscle aches	Body	Back & lower back ache	Rheumatism	Headache	Other		No	Yes	Total
Home décor	2,7	4,1	8,1	1,4	2,7	5,4	2,7	2,7	0,0	0,0	33,8	35,1	6,8	4,1	14,9	Home décor	26,5	73,5	100,0
Pyrotechnics	3,8	1,9	19,2	0,0	0,0	3,8	0,0	3,8	1,9	7,7	59,6	61,5	9,6	40,4	1,9	Pyrotechnics	30,0	70,0	100,0
Okra	26,9	0,0	42,3	11,5	1,9	0,0	0,0	0,0	0,0	5,8	48,1	48,1	19,2	42,3	0,0	Okra	41,7	58,3	100,0
Fashion accessories	23,0	6,6	11,5	0,0	0,0	6,6	0,0	0,0	0,0	0,0	52,5	42,6	0,0	29,5	1,6	Fashion accessories	30,8	69,2	100,0
All	13,4	3,3	18,8	2,9	1,3	4,2	0,8	1,7	0,4	2,9	47,3	45,6	8,4	26,8	5,4	*All*	31,7	68,3	100,0

THAILAND

	General mild fever, common cold, tired, etc	Eye infection	Skin problem	Breathing, pulmonary problem	Stiff neck	Back, arm, leg problem	Other	More than one
Paper product	4,6	0,0	4,6	4,6	6,2	40,0	4,6	10,8
Leather craft	6,6	1,6	4,9	4,9	9,8	29,5	1,6	21,3
Hybrid seeds	23,8	0,0	19,0	0,0	4,8	61,9	0,0	81,0

Note: Women here refers to all females 15 years old or more. Only the share of those giving an affermative answer is shown in the tables.

*Any health problem lasting a month.

Source: UNICEF survey

Table 17: *Membership of organizations hbw - household (per cent)*

INDIA Are you a member of any labour or trade association?

	Total women			Total women hbwers		
	Yes	No	Total	Yes	No	Total
Incense stick	0,9	99,1	100,0	1,2	98,8	100,0
Bidi (MP)	77,8	22,2	100,0	75,7	24,3	100,0
Bidi (TN)	23,7	76,3	100,0	21,6	78,4	100,0
Zardosi	1,4	98,6	100,0	1,5	98,5	100,0
All	15,6	84,4	100,0	16,8	83,2	100,0

PAKISTAN

	Have you ever negotiated a better rate via collective action (working together with fellow hbworkers)?			Do you access the services of the organization?			Would you be willing to engage in collective action to negotiate wages rates/better conditions if an organization were to assist you?		
	Yes	No	Total	Yes	No	Total	Yes	No	Total
Incense stick	14,3	85,7	100,0	1,3	98,7	100,0	46,8	53,2	100,0
Carpet weaving	6,5	93,5	100,0	0,0	100,0	100,0	49,4	50,6	100,0
Sack stitching	16,0	84,0	100,0	10,7	89,3	100,0	53,3	46,7	100,0
Prawn peeling	13,5	86,5	100,0	1,4	98,6	100,0	62,2	37,8	100,0
All	12,5	87,5	100,0	3,3	96,7	100,0	52,8	47,2	100,0

INDONESIA

	Is there an organization which can help you to get better pay ?			Are you a member of a workers' organization ?			Saving / schemes		
	Yes	No	Total	Yes	No	Total	Yes	No	Total
Pottery	0,0	100,0	100,0	0,0	100,0	100,0	21,4	78,6	100,0
Rattan	1,3	98,7	100,0	0,0	100,0	100,0	2,9	97,1	100,0
Batik	0,0	100,0	100,0	0,0	100,0	100,0	11,4	88,6	100,0
All	0,4	99,6	100,0	0,0	100,0	100,0	11,9	88,1	100,0

PHILIPPINES

	Patamaba member		
	Yes	No	Total
Home décor	33,3	66,7	100,0
Pyrotechnics	2,6	97,4	100,0
Okra	54,3	45,7	100,0
Fashion accessories	63,6	36,4	100,0
All	36,8	63,2	100,0

THAILAND Are you a member of any labour or trade association?

	Yes	No	Total
Paper product	94,8	5,2	100,0
Leather crafts	87,1	12,9	100,0
Hybrid seeds	98,6	1,4	100,0
All	93,6	6,4	100,0

Source: UNICEF survey

Table 18: *Ranking of problems by sector, group of women hbwers*

INDIA What are the main disadvantages of this work?

	Low wages	Long hours	Space	Seasonality	Lack of benefits	Delayed payment	Health problem	Children neglected	Lack of alternative empl.	Credit
Agarbathi-Baangalore	_	_	_	_	_	_	_	_	2	1
Bidi- M.P.	1**	_	_	_	3^	_	_		2#	_
Bidi-(TN) Pernambut Vill	1*	_	_	_	3^	_	_	2	4	_
Bidi-(T.N.) Jeevanagar Vill	1**	_	_	_	_	_	5	4	3	_
Zardosi - Urban	1	2	3	4	3	_	_	_	_	_
Zardosi - Rural	1	3	5	_	2	4	_	_	_	_

Note: * high rejection rate; ** lack of work; # unemployment among men; ^ low awareness – facilities exist
Source: UNICEF, Focus Group Discussions

PAKISTAN What is the main disadvantage of hbw?

	None	Makes the house messy	Less time tiring	Very for family	Low income	Health problems	Long hours	Take up limited living space	Others
Incense sticks	6	3	5	2	4	1	_	7	_
Carpet making	7	5	4	2	3	1	6	_	8
Sack stitching	6	3	5	2	3	1	_	7	_
Prawn peeling	_	3	4	2	5	1	_	6	_
All	6	3	5	2	4	1	7	7	8

PHILIPPINES What are the problems that you experience in the work you do now?

	Low irregular pay	Lack of capital / credit to sustain production	Few orders	Many rejects	Orders are cancelled	Pollution of community	Hazards of work to body parts and health	Disorder and violence at home	Lack of alternative employment	Added burden imposed by licensing requirements	Lack of social protection and services	Seasonal work	Violence in the community (incidence of rape and incest)/ inadequate peace and order/ drug addiction	Dangers form inadequate health and sanitation/many mosquitoes
Home décor	1	2	3	4	5	6	7	8						
Pyrotechnics	1	2	3	_	_	_	4	7	5	6	8	_	_	_
Okra	1	8	_	_	_	_	4	7	3	_	5	2	6	9
Fashion accessories	1	2	3	4	5	6	7	8	_	_	_	_	_	_

THAILAND

	No problem	No equipment Tools	Health impact	Inconsistent work supplies	Limited work quota	low price, low pay, late payment	Work available only seasonally	More than one
Paper Product	1	7	2	3		5	5	4
Leather Craft	1		2	3	7	6		5
Hybrid Seeds	1	3	7	8	_	4	6	4

This has emerged clearly in the FGDs and from the survey, where the women were asked about their problems and their priorities for possible government intervention. The perception and the ranking of problems obviously depend on the level of development of the socio-economic system. If the local infrastructure is underdeveloped, the family's attention is rightly focused on survival and hbw is seen as a survival strategy. This is the case in India (Table 18).

In India, according to women home workers, the most serious problem was that of low piece-rates. Long hours of work and the lack of benefits, with low wages, were seen as the three most important problems. Lack of alternative employment is also cited as a major problem. In Pakistan, health problems seemed to figure at the top of the list of problems in all sectors. The tiring nature of the work was ranked as the second most serious problem in all sectors, followed by low income.

In the Philippines, the low/irregular pay was seen by home workers as the most serious problem. Lack of credit/capital to sustain production and the limited number of orders were ranked as the next two most important ones.

In Thailand, a significant proportion of home workers felt that they had no problem. However, the women felt the health impact of the work was serious; irregular supply of work was also cited as a problem in two of three sectors.[39]

If the level of socio-economic development of the household and of the local areas is a bit higher, the families concentrate more on issues related to their business as micro entrepreneurs. For the priorities, the ranking depends again on the household and local infrastucture, but is focused on how to improve the hbw income generating activity (Table 19).

The workers were also asked about their views on the priority interventions that the government should take to help them. In India, social security and regular work were seen as the important interventions; minimum wage and health facilities were also identified as priorities. Possible government interventions are (ranked in the following order): loans, pensions, provident fund, insurance, and finally, minimum wages. In Pakistan, credit/financial assistance were seen as priorities; free education for children and alternative employment were also cited as high priorities.

In the Philippines, the workers felt that the most important thing was to ensure a steady flow of orders; a higher piece rate and access to credit were also seen as important potential interventions. In Thailand, marketing and skill training was seen as the most important intervention, followed by help through a credit line, and help with legal and welfare protection.

In the two sub-sections that follow, we focus on the factors influencing the health problems and remuneration of women hbwers.

39 No information is available for Indonesia.

▪ 7.1 *Health and economic issues related to women home based workers: some empirical evidence*

Considering the two types of intervention to foster the synergies, in this section we examine the factors that influence the income of home workers, and affect women's health.

The health of women home workers

Here we provide some empirical evidence on the determinants of women's health status. The aim is to understand which factors affect the health of women working as home workers.
The woman's health status (WHS) may depend upon various factors:
WHS = f [woman's age, number of children, educational attainment, hours worked, type of job (i.e. dangerous/non-dangerous), health prevention/social protection, income and assets of the household]

The dependent variable capturing the woman's health status (WHS) is the women's perception of their status of health. The woman was asked if she had health problems due to home based work. Different kinds of diseases were recorded. The dependent variable for each woman was built on the number of diseases and varies from 0 (no health problems) up to 7.[40] Therefore, when the dependent variable consists of such ordered attributes, the ordered logit model is used. Ordered logit models are used to estimate the relationships between an ordinal dependent variable and a set of independent variables.

The data utilised in the analysis are from the India and Pakistan surveys.[41] The ordered logit regression is used for estimation of the coefficients for each country separately (Table 20).

The estimates are carried out using the Huber/White/Sandwich estimator of variance to obtain robust variance estimates.

India

Table 20 presents the findings on the determinants of health status. The older the woman, the higher is the probability of her being in poorer health; the coefficient is quite low. The number of children a woman has also influences her health negatively.

The education of the women influences positively the health status,

40 For the list of diseases/illnesses see Table 16. For the purposes of the regression, the more illnesses a worker has, the more unhealthy we take the worker to be. The alternative was to use a logit model, with 0 for 'no disease' and 1 for 'with disease'. We are making no judgements here about the intensity of a disease, or how the functioning of a worker is affected by any particular disease afflicting her; only that the more the number of illnesses afflicting her, the more unhealthy she is.

41 As mentioned in the methodology (Section 2) the results are valid at country level for India and for urban/slum areas in Pakistan. Indonesian data were not used because the question asked was too general, not specifying if the health problem were related to the hbw activity.

Table 19: *Ranking of priorities by sector/group of women hwbers*

INDIA Ranking of priorities

	Work place	Social security	Min. wages	Altern. Emp.	Loan facility	Schools	Training	Health facilities	Work security
Agarbathi-Baangalore	_	4	_	_	2	5	_	3	1
Bidi- M.P.	_	1	_	3*	_	_	_	2	_
Bidi-(TN) Pernambut Vill	_	_	_	_	_	_	1	_	_
Bidi -T.N.) Jeevanagar Vill	_	2	_	1	_	_	_	3	_
Zardosi -Urban	1	2	3	4	5	6	_	_	_
Zardosi - Rural	_	1	2	3	4	5	_	_	_

Note. * including jobs for men

Source: UNICEF, Focus Group Discussions

INDIA Possible Interventions by the Government (per cent)

	Pension/ Provident Fund/ Bonus/ Insurance	Loans	Minimum wages/ Increase in wages	Free/ subsidized schooling/ Good scholarship	Quality of education be improved to get good jobs	Evening school/ Boarding school	Free/ subsidized medical treatment	Provision for housing	Employment in activities other than HBW	Regular employment	Encouragement and recognition of HBW	Pre school with supplementary feeding	Reduction of middlemen	Other facilities	No response	Total
Incense stick making	2.3	63.0	12.7	0.6	0.0	0.0	0.0	12.7	7.5	0.0	0.0	0.0	0.0	0.0	1.2	100.0
Bidi (MP)	1.8	10.1	29.4	0.0	0.0	0.0	20.2	18.3	13.8	0.0	0.0	0.0	0.0	6.4	0.0	100.0
Bidi (TN)	5.4	3.8	13.6	15.8	13.6	7.6	6.5	10.3	9.2	0.0	0.0	10.3	0.0	0.5	3.3	100.0
Zardosi	42.5	25.9	5.2	2.1	0.0	0.0	5.7	0.0	0.0	10.9	2.6	0.0	0.5	2.1	2.6	100.0
All	14.9	26.9	13.5	5.2	3.8	2.1	6.8	9.3	6.8	3.2	0.8	2.9	0.0	1.8	2.0	100.0

PAKISTAN Kinds of assistance needed for hbw from government and/other organizations to improve your welfare (per cent)

	Technical and marketing training	Credit, financial assistance	Financial assistance to build the house	Assistance with forming movements-organizations	Framing better policy/ laws	Other (specify)	Free education for children	Provide employment	Provide safe drinking water and improve sewage facilities	Provide sewing machines	Provide health facilities	Govt. does nothing	Well paid HBW and market our goods	Provide electricity	Don't know	Nothing	Total
Incense stick	8.4	25.2	6.5	2.8	13.1	0.9	7.5	12.1	2.8	0.9	0.9	0.0	0.9	0.0	1.9	15.9	100.0
Carpet weaving	7.8	23.3	7.8	0.0	7.8	1.1	15.6	11.1	0.0	2.2	1.1	1.1	3.3	0.0	8.9	8.9	100.0
Sack stitching	12.5	5.7	15.9	1.1	3.4	3.4	11.4	12.5	2.3	1.1	3.4	0.0	4.5	0.0	13.6	9.1	100.0
Prawn peeling	5.6	4.4	20.0	0.0	2.2	0.0	16.7	6.7	7.8	0.0	4.4	1.1	10.0	2.2	13.3	5.6	100.0
All	8.5	15.2	12.3	1.1	6.9	1.3	12.5	10.7	3.2	1.1	2.4	0.5	4.5	0.5	9.1	10.1	100.0

PHILIPPINES Ranking of priorities

	Ensure steady flow of orders	Increase piece rates and lower prices of commodities	Have more access to credit	Improve educational facilities and support for children	Organize to raise piece rates through dialogue w/ subcontractors	Prevent undue competition from foreign –made fire-crackers	Producers and workers trained in safe and modern ways by the Pyrotechnics Regulatory Board	Alternative skills training, coupled w/ credit and market access	Make representations through producers' associations	Gender sensitivity training and other community-based interventons	More roads, schools, health services through community action at LGU level	Improve health and sanitation	Prevent drug addiction and violence in the community, especially violence against women
Home décor	1	2	3	4	_	_	_	_	_	_	_	_	_
Pyrotechnics	_	_	2	_	1	3	4	5	6	7	8	_	_
Okra	1	2	_	3	_	_	_	_	_	_	_	4	5
Fashion accessories	1	2	3	4	_	_	_	_	_	_	_	_	_

THAILAND Assistance needed (per cent)

	Market skill training	Specialised skill training	Accounting skill training	Help with credit line	Help with marketing	Help with forming org.	Help with legal and welfare protection	Other
Paper product	2.1	11.5	-	2.1	45	6.3	4.2	46.9
Leather craft	2.9	5.7	1.4	8.6	2	8.6	24.3	38.6
Hybrid seeds	-	10.0	-	14.3	21.0	4.3	7.1	60.0

Source: UNICEF survey

reducing the probability of being sick; the effect is more than double compared to the age effect. This is in line with the logic of the first synergy.[42] The income per capita in the household and the ownership of assets such as the house are found non-significant; but we also note that the workers receive very little non-wage benefits.

As emerged in the focus group discussion we found that incense stick making is dangerous for health. A woman involved in this activity has a higher probability of being sick. The amount of hours worked in a year in hbw are positively related to the health status. At first glance this is counter intuitive. However, this is probably due to the perception that being sick reduces the capability to work; its effect, however, is really negligible. The employers' benefits (other than wages) given to the women are found to be non-significant.

The unhygienic environmental conditions of the surroundings of the house (dummy) influence the health status negatively and strongly.[43] This is obviously a problem which needs a collective response. Urban location of the households also negatively impacts health, perhaps on account of the congested slum areas in which home workers live.

Pakistan

The age of the woman is non-significant as well as the number of children a woman has. These results are probably due to the age range of the Pakistani women surveyed, mainly between 15 and 45 years old, while in India the age is up to 65.[44] The education of the women influences positively the health status, reducing the probability of being sick. The expenditure per capita (as proxy of income) in the household and the ownership of assets such as the house are found non-significant.

The amount of hours worked in a year in hbw are significant and positive; the more a woman works, the higher is the probability of being seriously sick. Again, as for India, we found that incense stick making is a dangerous activity for health. A woman involved in that sector has a higher probability of being sick and the coefficient for Pakistani women is very high. The employers' benefits, other than wages, to the women are found non-significant.

The possibility of access to services given by organizations (among which health organizations) reduce the probability of being sick.

Women home workers' productivity and collective action

Having examined the determinants of womens' health status (as one side of the synergies), we also explore the determinants of their productivity. This is done

42 We found in the companion paper that the higher the education of the mother the lower the conditional probability of her child working (Mehrotra and Biggeri, 2002).

43 The interviewer had to make a judgement about whether the surroundings of the worker's home were: dirty, average, or clean. The dummy is constructed such that dirty is 1, while the other two are 0.

44 In Pakistan the questionnaire was administered only to one woman per family working in hbw; in India, information was obtained from all the women home workers in the family. It is the latter phenomenon which explains the larger age range in India.

in order to understand if 'alternative' factors (other than capital and labour, the traditional neoclassical factors) affect womens' productivity and thus income and wealth.

In order to make the data of the different sectors comparable, the dependent variable used is the income per hour of work. The productivity of a

Table 20: *Determinants of women's health status: ordered logit estimates*

INDIA

Number of obs= 444, Wald χ^2 (10)=69.98, Prob > χ^2 = 0.000, Log likelihood = -664.13, Pseudo R^2 = 0.056

Dependent ordinal variable: Women's Health Status

	Coef.	Robust Std. Err	z	P>|z|	[95%Conf.	Interval]
hrswrhyear [hours worked in hbw in a year]	-0.0002984	0.0001768	-1.69	0.091	-0.000645	0.0000482
Age [of the woman]	0.0234585	0.0090692	2.59	0.010	0.0056833	0.0412338
Edu [women's education in years]	-0.075595	0.0270843	-2.79	0.005	-0.1286791	-0.0225108
Income per capita [of household]	0.0000497	0.0000338	1.47	0.141	-0.0000165	0.0001159
E_ben [dummy, benefits from employer yes1]	0.2150315	0.2170238	0.99	0.322	-0.2103273	0.6403903
Nchildren [number of children]	0.2898063	0.0705908	4.11	0.000	0.1514509	0.4281618
Home owned [dummy, yes 1]	0.2789315	0.1936192	1.44	0.150	-0.1005552	0.6584181
Housesurr [dummy unhygienic surrounding yes 1]	0.6494494	0.2699895	2.41	0.016	0.1202798	1.178619
Urban [dummy, for location, yes 1]	0.7133684	0.1976615	3.61	0.000	0.3259589	1.100778
Incense [dummy, incense activity, yes 1]	0.5403775	0.1840882	2.94	0.003	0.1795713	0.9011837
cut1	1.390376	0.4666976 (Ancillary parameters)				
cut2	1.899287	0.477251				
cut3	2.794138	0.4955282				
cut4	3.786993	0.5128698				
cut5	4.983235	0.5530716				
cut6	7.048143	0.7899159				
cut7	8.150537	1.127142				

PAKISTAN

Number of obs=294, Wald χ^2(9)=78.08, Prob > χ^2 = 0.000, Log likelihood = -526.80, Pseudo R^2 = 0.064

Dependent ordinal variable: Women's Health Status

	Coef.	Robust Std. Err	z	P>|z|	[95%Conf.	Interval]
hrswrhyear [hours worked in hbw in a year]	0.0003467	0.000123	2.82	0.005	0.0001055	0.0005878
Age [of the woman]	-0.0134369	0.0140544	-0.96	0.339	-0.0409831	0.0141092
Edu d [dummy for the woman's education/ literacy, yes 1]	-1.367789	0.405775	-3.37	0.001	-2.163093	-0.5724843
Expenditure per capita [of household]	-0.0003312	0.0003894	-0.85	0.395	-0.0010945	0.0004321
Nchildren [number of children]	-0.0257268	0.0713687	-0.36	0.718	-0.1656069	0.1141534
Orgacc [dummy, use of services of an organisation, yes 1]	-1.158934	0.6090884	-1.90	0.057	-2.352725	0.0348573
E_ben [dummy, benefits from employer yes1]	0.1523254	0.4888141	0.31	0.755	-0.8057327	1.110383
Home owned [dummy, yes 1]	0.1833304	0.2396994	0.76	0.444	-0.2864719	0.6531326
Incense [dummy, incense activity, yes 1]	1.637722	0.2507255	6.53	0.000	1.146309	2.129135
cut1	-2.638061	0.693879(Ancillary parameters)				
cut2	-2.222668	0.6794963				
cut3	-1.679498	0.678325				
cut4	-.7995088	0.6651505				
cut5	0.2521835	0.6591545				
cut6	1.377274	0.6549005				
cut7	2.239085	0.6593473				

Note: Regression with robust standard errors (Huber/White/Sandwich estimator).

woman is related theoretically to various factors such as demographic characteristics, the level of education (formal education), the years of experience (informal training) in the case of skilled processes, personal health conditions, membership of an organization to pursue joint actions.

The functional form utilised is an unconstrained Cobb-Douglas production function. Natural logarithms are used to transform and to linearise the functional relationship – the transformation reduces the overall variability of the data and thus the heteroschedasticity at the cross section level. The productivity function basic model becomes:

Table 21: *Determinants of women home base workers productivity: OLS estimates*

INDIA

Number of obs = 455, F(8,446) = 6.51, Prob > F = 0.000, R-squared = 0.119, Root MSE = 0.561

Dependent ordinal variable: Woman hbw income per month (Ln)

	Coef.	Robust Std. Err	t	P>t	[95%Conf.	Interval]
Age [Ln of the woman's age]	0.130477	0.0970591	1.34	0.180	-0.0602729	0.3212268
Edud [dummy for the woman's education/literacy, yes 1]	0.1035155	0.0597045	1.73	0.084	-0.0138217	0.2208527
Expwk [Ln of years of work/experience in the activity]	0.0161195	0.0062773	2.57	0.011	0.0037828	0.0284563
Whs [Ln of woman health status –ordinal variable]	-0.0012711	0.0025309	-0.50	0.616	-0.0062451	0.003703
H_day [Ln of number of hours worked in a day]	0.4744771	0.0965706	4.91	0.000	0.2846871	0.664267
Organ [dummy, organizational membership, yes 1]	0.1434099	0.0590343	2.43	0.016	0.0273899	0.25943
Electrd [dummy for electricity in the house, yes 1]	0.1210765	0.0770516	1.57	0.117	-0.0303527	0.2725058
Zardosi [dummy, Zardosi activity, yes 1]	0.1919716	0.0702811	2.73	0.007	0.0538484	0.3300949
constant	4.885614	0.3832891	12.75	0.000	4.132337	5.638891

PAKISTAN

Number of obs = 303, F(7,295) = 2.80, Prob > F = 0.0078, R-squared = 0.0415, Root MSE = 3.5275

Dependent ordinal variable:

Woman hbw income per hours of work (Ln)	Coef.	Robust Std. Err	t	P>t	[95%Conf.	Interval]
Age [Ln of the woman's age]	-0.2555062	0.5382397	-0.47	0.635	-1.314782	0.8037699
Edud [dummy for the woman's education/literacy, yes 1]	0.7784811	0.31863	2.44	0.015	0.1514051	1.405557
Expwk [Ln of years of work/experience in the activity]	0.0258663	0.036135	0.72	0.475	-0.0452487	0.0969813
Whs [Ln of woman health status –ordinal variable]	-0.0313856	0.0133544	-2.35	0.019	-0.0576675	-0.0051037
Collective action [dummy, collective action of hbwers, yes 1]	0.4824599	0.2593642	1.86	0.064	-0.0279788	0.9928986
Electrd [dummy for electricity in the house, yes 1]	0.2200327	0.5793973	0.38	0.704	-0.9202433	1.360309
Prawnpe [dummy, prawn peeling activity, yes 1]	1.559816	0.45651	3.42	0.001	0.6613871	2.458245
constant	0.3199468	1.7619	0.18	0.856	-3.147539	3.787433

Note: Regression with robust standard errors (Huber/White/Sandwich estimator).

$$\ln(\text{Woman hbw income}_i) =$$

$$C + \beta_1 \ln(\text{Age}_i) + \beta_2 D(\text{Edud}_i) + \beta_3 \ln(\text{Expwk}_i) + \beta_4 \ln(\text{Whs}_i) + \beta_5 D(\text{Organ}_i) + \beta_6 D(\text{Electr\_d}_i) + \beta_7 D(\text{Actd}_i)$$

where, as reported in Table 21, the Age is the age of the woman, the Edud is a dummy for her education/literacy, Expwk are her years of experience/work in the activity, Whs is the woman's health status, organ is a dummy for membership of an organization (collective action is a dummy for participation in joint action to obtain better conditions for Pakistan), Electrd is the dummy for electricity in the house, and then there is Actd, which is a sector activity dummy (which varies by country).

The data utilised in the analysis are from the surveys in India and Pakistan – for each country separately.[45] The Ordinary Least Square (OLS) estimates are carried out using the Huber/White/Sandwich estimator of variance to obtain robust variance estimates.

In *India* we did not have the income per hours of work so we used the income from hbw per month. For this reason the hours worked per day (H_day) was added to the regressors. As expected, the amount of hours worked per day have a positive impact on the income per month. The results indicate that the education of the woman, as well as her work experience, will influence her productivity; the education has an higher impact. Membership of a women's association of home workers influences the productivity positively and quite heavily. Joint actions seem to produce positive effects in the productivity expressed in value terms. The age of the women and the input available (such as electricity) although with positive sign (predicted sign) are found non-significant. The impact of health status is negative (as predicted) but non-significant. The women workers in zardosi have higher productivity.

In *Pakistan* the dependent variable is income per hours of work. The results indicate that the education of the woman influences her productivity positively, while the years of experience, although positive, is non-significant. Collective action for obtaining better prices has a positive and high effect for increasing the income per hour. Joint actions seem to produce positive effects in the productivity expressed in value terms. The age of the women and the input available (such as electricity) are found non-significant. The health status is negative and significant: the more serious is the woman's illness the lower is her productivity (the effect is quite low). Women workers in prawn peeling have higher productivity.

45 The Indonesian data were not used, as the income from hbw was attributed in general at household level and not to each member of the household. Such information was available only for a very limited number of women.

8. Government and Non Governmental Initiatives for Home Workers in South and South East Asia

There are three major ways in which social security could be promoted for informal sector workers and their dependants: through specially designed social insurance schemes, through social assistance[46] and through the extension and reform of formal sector social insurance (Van Ginneken, 1996).[47] However, none of the countries surveyed have social security mechanisms of these kinds in the informal sector implemented by the government (with some exceptions, as we discuss in the final section).

While governments cannot be said to have taken much action on behalf of home workers in the selected countries, some action has indeed been taken. In fact, as we discuss below, the Thai government has been quite proactive in this regard.[48]

India is a signatory country of the ILO Home Work Convention 177 (1996). Although the government of India has not yet ratified the Convention, it has embarked on various initiatives towards that goal. According to the National Consultation on Home Based Workers launched by the Ministry of Labour in 2000, the government's aim is to first create the necessary infrastructure to then be able to adopt the National Policy on Home Work required by the ILO Convention.[49] In the legal sphere, amendments to the existing legislation were proposed to develop legislation for unorganized workers during the Second National Commission of Labour.

Another important initiative that has benefited considerably bidi home workers in Tamil Nadu, is the tripartite body of the Bidi Welfare Fund. This fund was created in 1976 and is administered departmentally through a tax levied on the production of exports. The fund's goal is to provide medical care, education for children, housing, water supply and recreational facilities. The fund also serves as a forum where mechanisms for implementing a policy of basic social security are discussed.

Until now, the government has not launched an official survey of Home Workers at a national level. However, it has included key questions in the 55th National Sample Survey[50] that has revealed an overall extent of home workers

46 Social insurance usually consists of measures to reduce risks that a worker is subject to through: old age pension, unemployment benefit, maternity benefit, life insurance (including disability), and health insurance. Social assistance usually consists of cash payments of various kinds (e.g. child allowance, food subsidies).

47 Social security can be defined as: the provision of benefits to the households and individuals; through public or collective arrangements; to protect against low or declining living standards; arising from a number of basic risks and needs (Van Ginneken, 1996).

48 In the view of the Thai study authors, an important reason for the Thai government being as solicitous as it has been for home workers is that the sectors where home work is prevalent are significant contributors to foreign exchange earnings.

49 ILO Convention 177, Chapter 1.

50 A question on the place of work was canvassed in the 55th Round National Sample Survey in 1999-00. In addition, it included the 'unincorporated proprietary and partnership enterprises' as informal sector enterprises.

at a national level. In addition, non-government projects have contributed to the gathering of data including a five-state survey (i.e. MP, UP, Rajasthan, Gujarat and Karnataka) conducted by SEWA.

The most important initiative towards the protection of home workers in India has come from home workers themselves. The Self-Employed Women's Association (SEWA) has been active in the organization of self-employed women, including home workers over the last two decades. The aim of SEWA is to promote protection and rights of home workers. In addition, Indian home workers belong to the international alliance of organisations, Homenet South East Asia. This network advocates for home workers' rights and aims at influencing national policy and legislation in their favour.

No specific national programme towards home workers in Pakistan has been implemented until today. In the legislative sphere, although no direct legislation exists to protect home based workers, international conventions as well as the Constitution of Pakistan,[51] broadly interpreted, can be applied toward such protection. At the international level, Pakistan is a member of the following ILO Conventions: Convention 177 (1996) on Home Workers, Labour Statistics Convention (1985), and Maintenance of Social Security Rights Convention, 1982. Regarding data gathering, no specific national initiative exists. The existing data are mainly obtained from individual studies undertaken by international agencies and local researchers.[52]

Since the implementation of the Fourth National Plan (1976-1981),[53] the government of *Thailand* has favoured outsourcing to home workers and advocated for their rights and well being. This was basically due to advantages that the subcontracting arrangements provided to the government including the reduction of production costs, investment promotion and the creation of sources of employment for those excluded from the formal labour market.

For these reasons, the Thai government launched various research projects in order to identify the main needs and conditions of home workers. The first initiative was the carrying out and publication of the survey Report on the Employment Situation of Home Workers in 1986 conducted by the Ministry of Labour. The Department of Labour, Welfare and Protection conducted a similar project in three provinces in the northeastern region of the country. In addition, in 1989 Thailand became part of the Regional Research Network on the Status of Home Workers supported by the ILO.[54] Individual studies that

51 Specifically the Article of the Pakistani Constitution that deals with 'elimination of all forms of exploitation and the gradual fulfilment of the fundamental principle, from each according to his ability to each according to his work'. Source: Government of Pakistan, 1973, *The Constitution of Pakistan* (Lahore: Publishers Emporium).

52 These studies include Awan and Khan (1992), SCF (1997), Ahmad, Qaisrani and Tahir (1998) and Khattak and Sayeed (2000). At an international level the World Bank conducted a study on female home workers.

53 Through this plan, the government favoured policies towards the industrialization of the export sector with emphasis on labour intensive industries.

54 This network consisted of other East Asian countries including The Philippines and Indonesia.

have contributed to the data collection include an in-depth study on home workers in the garment industry in Bangkok undertaken by an NGO in collaboration with local academic centres.

At the institutional level, the government created a committee on Development and Protection of Home Workers (Cabinet Resolution, March 24, 1998). This committee is based on a tripartite membership that consists of NGOs, private companies and government officials. The aim is to coordinate the various initiatives at a national level. Although the government has not yet ratified the ILO Home Work Convention 177 (1996), it has launched important institutional initiatives. In 1998 the Office of Home Workers was established under the Department of Welfare and Social Protection. The Office undertakes various activities including the preparation of regulation standards for the protection of home workers, coordination between the various agencies involved, and the coordination of the gathering and updating of data.

One of the most effective initiatives in favour of home workers undertaken in Thailand was the creation of the Homenet network, itself part of Homenet International (of which SEWA in India is also a member). This network consists of NGOs, government agencies[55] and home workers' groups. The main goal of homenet is to ensure the protection of home workers through the provision of safety nets, social welfare and compulsory registration. In addition, the network aims to ensure the participation of home workers in the national economy by providing them with technical support, skill development and training. Homenet has launched various campaigns aimed at raising awareness regarding home workers' rights among entrepreneurs and government officials.

In *Indonesia* the ILO in collaboration with the Danish International Development Agency (DANIDA) implemented a project (between 1988 and 1996) aimed at promoting the social protection of home workers. This project was part of a three-country programme with Thailand and the Philippines. Within the same project several studies were undertaken to determine the main needs and conditions of home workers. For example, the project 'Rural Women Workers in the Outsourcing System' revealed the lack of access and control over the means of production and resources of workers that led to poor working conditions. Regarding official data gathering, the Ministry of Manpower set up a monitoring scheme to gather data regularly. Currently the Central Statistical Board is considering adding a question regarding 'place of work' in the national labour force surveys, also known as *Sakernas* series.

The Indonesian government has not implemented policies specifically towards home workers. However it has been very active on implementing policies towards small and medium enterprises which implicitly include home

55 The government agencies involved are the Ministry of Labour and Social Welfare, Ministry of Interior, Ministry of Agriculture Cooperatives, Ministry of Education, Ministry of Industry, Ministry of Commerce, Employers' Organisation Council, Industrial Council, and Provincial Trade Chambers.

industries. The institution responsible for this programme is the Municipal Government of Jakarta established in 1993. The policies include creation of credit schemes and promotion of capital access for small and medium scale enterprises in collaboration with local banks.

In *The Philippines* the most important national initiative towards home workers has been the undertaking of a National Survey on Home Workers in 1993. In the legal sphere, the government of the Philippines attempted to regularise subcontracting agreements and provide legal protection to home workers. In 1997, the Department of Labour and Employment attempted to amend the Labour Code (i.e. Department Order No. 10) and include additional provisions to regularise the subcontracting agreements (Code 10). Unfortunately, due to the change of government the amendment was never implemented.

Non-governmental initiatives include the advocacy campaign aimed at promoting the protection of home workers developed by the PATAMABA network. This organization consists of a network of NGOs and home workers in the Philippines. PATAMABA originally supported the establishment of Code 10 and strongly advocated for the implementation of Department Order 5 (D.O. 5) that included special provisions in favour of home workers, including further details about the rights of home workers. In addition, PATAMABA is currently undertaking an advocacy campaign aimed at pressuring the government to ratify the ILO Convention 177.

The lukewarm attitude of governments in Asia is not dissimilar to the situation in Latin America. However, in many Latin American countries including Peru, Brazil, Paraguay, and Argentina, laws regarding home workers were made early in the 1990s. The law, with the exception of Chile,[56] considers home based work to be waged employment and provides equality of treatment in terms of social security and wage level rights. For example, the Peruvian labour legislation contains a number of long-standing and recent legal provisions protecting home based work. The first embodied legislation dates back to 1918 and referred to the establishment of minimum remuneration for piece work to home workers in State enterprises (Article 27 of Act No. 2851).[57]

56 Home based work in Chile was first regulated in 1931 in the Labour Code. However, in 1981 the military government's 'Employment Plan' restricted the regulation of employment relationships to basic aspects and eliminated the provision mentioned. Currently, Chile is one of the few countries where home based work is not regulated and is treated as 'the provision of services governed by civil law'.

57 Legislation in Peru evolved over time and home workers were even provided with social security rights through the 1980 Health Benefits Regime and the 1986 Peruvian Social Security Institute Pension Regime (Article 50, Constitution 1979). Home workers' labour conditions deteriorated with the exclusion of Article 50 in the last Constitution of 1993. This represented a step backward in terms of home workers' rights. However, thanks to the labour reform of 1991, home workers' rights are still taken into account in Chapter IV of the Legislative Decree No.728. This chapter sets down the legal framework and includes important provisions such as the requirement of a written agreement, registration, and social rights including paid holiday, bonuses, and compensation for length of service (Article 94).

Nonetheless, despite important progress in legislative terms in favour of home workers, most standards and regulations in Latin America are largely disregarded. Non-compliance is due to high administrative costs, and inappropriate monitoring schemes (Tomei, 2000). In other words, by and large, there has been limited government action in favour of home workers, both in Latin America as well as Asia. The only exception in Asia is perhaps Thailand. With this overview in mind, we turn finally to the policy implications.

9. Conclusions and Policy Implications

What the analysis in this paper has suggested very strongly is the dual character of subcontracted home based work, at the micro (household) level as well as at the macro-level. This dual character is contradictory: on the one hand, it is an important source of income for the home worker households; on the other hand, the conditions of work, the low rates of pay, the close to poverty-line existence of the worker households, the health and child labour problems, all call out for much greater public intervention to protect the households. At the macro-level, forces are at work strongly encouraging the growth of subcontracting (as we saw in Section 2). If the synergies (discussed in Section 1) are to be realised, then public action needs to recognise both the efficiencies as well as inefficiencies of subcontracted home based work.

Our main findings were as follows. First, clustering theory tells us that there is a low road and high road to the development of local systems through micro-, small and medium enterprises. The low road is characterised by limited interaction and specialisation (especially vertical) among enterprises in the local system, limited action by the local government, limited institutional changes, little cooperation between enterprises, and so on. The high road is characterised by different actors in the local system cooperating, innovating, and competing, thus producing a collective efficiency of the system; this process along the high road also features the involvement of associations of producers, labour and local government. However, the experience of Asian developing countries with subcontracting involving home based work does not display even the characteristics of the low road to development. For this reason we called it the 'dirt road', which brings no human development. This is primarily because the subcontracting process, while offering work to those hitherto not in the labour force, offers very little else. The subcontracting is simply driven by the desire of firms to cut costs to the barest minimum. Meanwhile, there is very little government action to ensure social protection for the workers. As regards the state performing a role in the promotion of these economic activities, we saw earlier that only in Thailand has the state played a promotive role (primarily because the sector was perceived as a foreign-exchange earner through exports).

What needs to be done to at least reach the low road of local system development in the selected countries is encouragement by the government of some

cooperative action by home workers. In addition, there is considerable scope for government action in a number of spheres (an issue we turn to later in this section).

Second, most of the home worker households in the clusters in South Asia live below the poverty line, though in the clusters examined in South East Asia, that is the case for only some of the sectors. Most of the clusters in South East Asia have incomes above the national poverty line. This suggests that it is possible for hbw to be the launch pad for upward mobility. With the requisite support from government in terms of both social protection as well promotive action, the inter-generational transfer of poverty and the low-capability equilibrium trap can be broken.

The third finding was that, while it is impossible to establish quantitatively that subcontracting and hbw have been expanding in the countries under review (since we do not have baseline data for earlier years), there is prima facie evidence to suggest that the phenomenon has been growing (see Section 2). Fourth, we noted from the value chain analysis (Section 3) that the home workers were working under conditions which were exploitative – with workers obtaining a small share of the total price paid by the consumer of the product they produce. They work long hours, especially in the high season, for low piece rates (with delays in payment in many cases). The exploitation arises essentially due to the fact that the workers are isolated, and even though they live and work in a 'cluster' there is little collective action. In fact, the relationship between the employers/subcontractors and the home workers is a stable one – characteristic of a long-term stable work force for a single employer – yet there is exploitation by the higher levels of the value-chain and still no social protection.

Fifth, the feminisation of the work has important implications for the gender dimension of a household's human development cycle from generation to generation. Girls can play a key role in breaking the inter-generational transfer of poverty. Often in income generating activities male children tend to follow in the father's footsteps, while the female children those of the mother. Since hbw is mainly a female activity girl-children are more involved in helping their mother, as confirmed by the surveys. In some specific sectors daughters account for 90 per cent of the household members who help women in hbw. If the mother is engaged in hbw, the older girls in the family are the ones who start to assume the care responsibilities for other children, affecting their own schooling. In other words, there is a strong case here for providing community-based child care, so that the older girls can be freed from this care-giving responsibility. Alternative child care would enable the girls to go to school, and if necessary, work part-time.

Sixth, the low educational level of the home workers, and the health-related problems faced by them, indicated that without public interventions, the first synergy (between basic services) cannot be triggered in the case of these

families. This finding is confirmed by the econometric results, examining the determinants of health status in India and Pakistan. In particular, it is important to underline the positive role of education in health status, and the negative effect of dangerous activities such as incense stick making.

Finally, collective action by the home workers will be needed if their earnings are to rise. This was confirmed by the econometric analysis results for the same two countries. Collective action and organizational membership have a positive influence on women's productivity (in value terms). This calls for government support to relevant collective actions. The education and work experience have a positive influence on women's productivity (in value). Poor health status influences productivity negatively.

Subcontracted hbw may well be an efficient alternative to factory employment – however, the beneficiaries of lower cost so far seems to have been the employers only; workers have not benefitted. The objective is to move beyond the efficiency at the micro-level to an outcome which is efficient at the macro-level as well. Hbw may raise family incomes in the absence of alternative employment. But the vulnerability of workers in the relationship is inefficient and inequitable at the macro-level – the involvement of children in hbw at the cost of schooling, the excessively long hours worked by women, especially young women (the 'double burden'), the low piece-rates, the unhygienic working conditions, the lack of pension benefits – keeping families trapped at a low-level of equilibrium, and in a poverty trap. This is particularly true in hbw in the low-income countries, where schooling for all children, whether working or not, is not a norm. In the middle income countries, where schooling is a norm, the families engaged in hbw are above the poverty line – perhaps only just above, and hence vulnerable. In Thailand, where there is supportive action from the government, one could even argue that the 'SME-plus model' is working. However, in Indonesia, there are no specific policies towards micro enterprises like home industries; generally, government policies are geared towards SMEs, which implicitly include cottage industries. But, in fact, industries including hbw do not benefit from government support programmes, technical and administrative guidance, or credit schemes (Gardiner et al, 2001). As we have underlined collective action is not enough to procure economic development for SME and micro-enterprises; there is a need for intervention from local government, otherwise the opportunity for further economic development is limited.

Therefore, in order to capture synergies and positive externalities and to control negative externalities, collective action and public intervention are both necessary. Collective action has to be carried out at different levels. At local level, collective action should take the form of cooperatives or associations to increase bargaining power in economic terms and in political participation, and thus to obtain better health and education systems and other services which may facilitate market access and increase productivity as well as protec-

tion. At national level, policies have to be promoted in favour of the sector – from infrastructure to credit and industrial and trade policies.[58]

Three major policy implications from the preceding findings seem to emerge – and can be summarised in three words: registration, protection and promotion.

A defining characteristic of work in the informal sector is its invisibility to the policy-maker, stemming partly from its immense diversity. Invisibility, however, is not its natural fate, since informal sector workers form the majority of those in the labour force defined as those between 15 and 65. Those under 15 are working mostly from the home, which does make them more invisible. Invisibility arises primarily from the fact that until recently, national statistical systems were not counting the informal sector, in either their household or enterprise surveys. That pattern has been broken in the last 15 years or so, with some 60 plus countries having conducted surveys focusing on the informal sector. However, within the informal sector the phenomenon of home based work is not being counted. National sample surveys covering the home based worker are a very limited and extremely recent phenomenon. Even the Indian survey of 1999 (on informal non-agricultural enterprises) only had a few questions about home based work. Within the next five years this situation needs to change drastically if the invisibility of home based workers within the informal sector is to be mitigated.

However, relying on sample surveys is not sufficient; it is an important tool for policy-making, and for advocates to engage in policy-dialogue with government policy-makers. What is equally, if not more, important is that all home based workers are *registered*. For the worker's well-being, this is of more immediate and direct importance. It is also consistent with the ILO Recommendation on Home Based Work (a companion to the Convention). This could take one of several forms: the issuing of identity cards (as e.g. happens in the bidi-making sector in India) or the creation of a registration board (e.g. as proposed in the Pakistan study). The latter would involve the registration of the subcontractors as well. Once the workers have an identity they can at least claim some benefits. All workers, including those who work on a part-time basis, should be registered, given that for many hbw-ers, this kind of workforce participation is undertaken largely by women who have other responsibilities as part of social reproduction.

The registration of such workers is likely to be resisted by their 'employers'. There is evidence from the bidi industry in India that there is non-reporting of workers. Employers prefer a sale-purchase relationship between the hbwer and themselves, since that way they can avoid the responsibilities ensuing from a regular relationship. Of course, if the contractor himself is not registered, then the prospects for registration of the workers is correspondingly

58 Homeworkers activities are affected by local labour legislation, local industrial policy, national trade policy, trade policies of importers, multi-national trade policies (McCormick and Schmitz 2002, p.24).

reduced. There is also the issue of multiple types of home based work that such workers engage in: a woman may be an agricultural labourer in one season of the year, a leather craft worker in another, and a garment worker in another. In what sector of work should such a worker be registered? In one, both or neither? There is some risk of moral hazard if the worker is registered in both; at the very least, the worker needs to be registered in one sector. But since these records are meant to be computerised, and maintained locally, the risk of moral hazard can be substantially minimised if the worker is registered in both areas. In any case, the scale of the risk of moral hazard would depend upon the size of the potential benefits from registration. Dual registration is unlikely to be a major problem, given that our studies suggested that most hbwers tend to have stable relationships with a set contractor.

The second policy implication emerges from the need for protection of all those engaged in the informal sector manufacturing activities. The same mechanism for protection that we propose here could also apply to agricultural products and hence the agricultural sector. However, the mechanism for those who work in the services would be trickier, and hence could be more difficult to implement.[59] Sector and even product-group specific Welfare Funds, financed mainly from a levy on the product, could be a significant way forward for all informal sector manufacturing activities. Kerala state (India) has the distinction of 27 such Welfare Funds – all in the informal sector. The Philippines already has such a Welfare Fund in agriculture for plantation workers. Such product or activity-based social insurance mechanisms can be an important precursor to the more universal citizenship based on social insurance mechanisms, characteristic of industrialized countries.

We have already seen that in the case of bidi-making in India – an informal sector activity par excellence – a Welfare Fund has been in existence. Similar welfare funds exist for mica mines, for iron/manganese/chrome ore mines, building and other construction workers, and cinema workers. These funds place a levy on consumption or export of the products.[60] There are two fundamental requirements for setting up a successful welfare fund. First is the exis-

59 Even in services, such funds are not entirely inconceivable. They are already in place for film and cinema industry workers in India.

60 The construction workers fund is financed by the contributions made by beneficiaries, a levy on all construction works at rates between 1-2 per cent of the construction cost incurred by an employer and non-mandatory grant/loans by the central/state government. These funds provide several kinds of similar benefits, though here we dwell specifically on those available to bidi workers. There are public health and sanitation and medical facilities e.g. the Fund runs hospitals, a scheme for reservation of beds in tuberculosis hospitals, maternity benefits, and provides spectacles. Group life and disability insurance is provided, the premium for which is equally shared by the Bidi Workers Welfare Fund and the Social Security Fund of the government of India. There are educational schemes e.g. financial assistance to purchase uniforms, slates, notebooks, and textbooks; scholarships for children from class 5 onwards; a scholarship based on attendance in school by girls; and a lump sum given on passing board exams from class 10 onwards. The proposed national policy on home based workers formulated by the government of India's ministry of labour is advocating the widespread use of such welfare funds.

tence of an association based on trust. Second, administrative and management capability to collect contributions and provide benefits.

We believe that Welfare Funds must provide the following benefits at a minimum:[61]

1. Specific health benefits, related to the nature of the hbw, including maternity benefits;
2. Scholarships for children to go to school;
3. Old-age pension;
4. Life insurance;
5. Child care facilities.

These functions could only become operational if the welfare fund registers the workers, contractors and subcontractors. But each of the welfare functions is a critical element in a system of support for informal sector workers in a particular sector. Catastrophic health expenditures in poor households make all the difference between living above or below the poverty line. Functional, affordable schools of reasonable quality offer an alternative to children who would otherwise work full time; welfare funds have been used to provide scholarships which make all the difference, as we argue in a companion paper. Child care facilities on a community basis that can be organized through the auspices of a welfare fund would enable mothers to work, enabling them to join the labour force from home, which may otherwise not be possible. Girls who cannot go to school because they have to look after younger siblings while the mother works would be enabled by such child care facilities to go to school. The old-age pension benefits would partially compensate for the 'children for old-age security' argument for high fertility. Finally, the life insurance scheme would again cover the family in the case of the death of a key breadwinner in the family.

The precise nature of the welfare benefits to be included in the portfolio of services of the Fund will depend upon the specificity of the situation. Ideally, the Fund must provide only such services or benefits that it is capable of providing. For instance, it should not run schools or hospitals – that is naturally the responsibility of the state. The provision of functioning schools (where teachers are not habitually absent) and health centres (with doctors and paramedical staff present and medicines in stock) is not the responsibility of Welfare Funds. The responsibility of the Fund should be mainly confined, in its protective functions, to a.) old-age pension; b.) group life insurance against death and disability; and c.) child care facilities. However, ultimately, the decision should rest with the beneficiaries, since there are likely to be trade-offs

61 Eventually the kind of facilities that are offered should be the choice of the workers themselves, since the higher the benefits the larger the tax that will have to be levied. Inevitably, the facilities will vary depending upon the country and sector, but we believe that the facilities we list should be a minimum component.

between the number of functions and the size of benefits that can be paid out for each kind of benefit.

The case is often made for the need for such fragmented and dispersed workers to organise. In the absence of formal organisations, the Welfare Fund can, in the interim, serve as the means for bringing homeworkers together, sector by sector – giving them specific issues around which to pressure and lobby those who control their lives, whether it is employers or contractors, or government officials. In other words, the state has to take proactive action to enable the collective voice of the homeworkers to be heard on specific issues of concern to them – around the institutional framework of the welfare fund.

The political economy of financing such a fund is critical to its creation in the first place, and its sustenance thereafter. Given the wide diversity of goods produced in the informal sector, and the workers' consequent fragmentation and lack of organization, and the large size of the informal sector workforce, it is unrealistic to expect that the government would be willing to finance such a large number of sector-specific funds. The government may well be persuaded to provide some funds, but its most important role has to be to organize the creation, and the regulation, of such a fund, and ensure a product-based levy is collected and reserved exclusively for the Fund. The levy or tax has to be collected from the factories which subcontract the work or, where factories are not involved, the wholesalers responsible for marketing the product. Any products that are exported provide an additional opportunity for collecting the levy at the border. The levy has to be calibrated to meet the needs of the Fund. For example, that on bidis in India is a bare Re 0.50 (or one US cent) on 1000 bidis, which is too low, and perhaps accounts for the fact that the coverage of the fund is not universal for all bidi workers. The India study found that in many areas bidi workers were unaware of the existence of the fund.

The final policy implication relates to the promotive role of the government. We saw that in Thailand in particular the government seems to have played a strong role in promoting the goods produced through subcontracting. The promotive function should essentially involve a.) certification of skills, b.) training in design, c.) assistance with marketing and d.) the provision of credit. These are roles that rightly belong to the government. The issue, however, is whether the Welfare Fund should be the single window for the provision of these services to the home based workers. In other words, the issue is whether the protective and promotive functions should be combined. From the viewpoint of workers, the single window would offer the great advantage of simplicity and convenience. Otherwise, as is well known, government bureaucracies can prove intimidating for poor, often illiterate, workers especially if they are women. It would also offer the advantage of specialising in the needs of the workers in the particular group of products they are producing. This single window would be particularly appropriate where large numbers of workers are involved, and where they are concentrated in a geographic location. On the

other hand, in the case of other product-groups which involve smaller numbers of workers or who are more spread out geographically, the Welfare Fund itself may not be the most appropriate channel for providing promotive services for them. In fact, one function that promotive services need to perform is to help home based workers in declining industries to diversify their skills and branch out into other activities that might be on the upswing, or where product demand is expanding.

One of the ways of strengthening the bargaining position of home workers is to provide some competition to the subcontractors, by the creation of cooperatives. Such cooperatives can only arise if home workers organize themselves (perhaps with the help of some NGO). However, such action would have to be supported by government, since the cooperative would face the combined resistance of both subcontractors as well as their employers (the principal firm). The role of the cooperative would be to procure raw materials, ensure fair piece-rates, explore markets, and with government support, organize credit and assist in design development.[62]

The promotive role of government would be incomplete without some support, especially in the form of training for the subcontractor community. Our studies talk of the poor quality of products, and the inability of subcontractors to meet the specifications and requirements set by the principal. This is hardly surprising considering that many of the subcontractors have no formal business schooling. In several sectors in the countries studied, it was reported that the subcontractors had in fact emerged from the group of home based workers. In some cases they may have been encouraged by the principal firm to move into the subcontracting business. Training for such contractors could serve to create entrepreneurial talents from those already within the production chain.

In terms of regional priorities, a national policy on hbw is needed in all five countries studied. The requirement of registration of workers is equally important in both the middle-income as well as the low-income countries examined, just as is the need for national surveys based on representative samples. However, in the South Asian countries, the immediate priority should really be the panopoly of protective measures that we have identified. In South East Asia, on the other hand, there is scope for moving more rapidly on the promotive measures.

62 This is precisely the direction recommended in the Draft National Policy on Home Workers of the Government of India (Ministry of Labour, 2000).

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