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ORIGINAL PAPER

Skills development in the informal sector in India: The case of street food vendors

Matthias Pilz[1] · **Gengaiah Uma**[2] · **Rengan Venkatram**[3]

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Abstract The informal sector dominates India's economic life, so issues of skills development are particularly important. On the basis of a survey of 49 street food vendors in the Indian cities of New Delhi and Coimbatore, the authors of this article demonstrate that informal learning is a particularly significant form of vocational education and training. Vendors do not acquire skills in formal vocational education and training (VET) settings; for them, opportunities for learning on the job in family businesses or in informal employment are especially important. Unlike other studies, the authors' findings show that street food vendors have a wide range of specialist knowledge, skills and expertise required to conduct their business which they deploy profitably. These skills are not confined to preparing and selling food but also extend to areas such as price setting and marketing. All the street food vendors interviewed identified strongly with their occupation and expressed pride in it. Around half voiced a wish for further training. In this context, the authors suggest promoting non-formal learning settings geared explicitly to street food vendors'

✉ Matthias Pilz
matthias.pilz@uni-koeln.de

Gengaiah Uma
umamirun@gmail.com

Rengan Venkatram
dr.venkatrengan@rediffmail.com

[1] Center for Modern Indian Studies (CMIS), University of Cologne, Venloerstr. 151–153, 50672 Cologne, Germany

[2] School of Gender and Development Studies, Indira Gandhi National Open University, Maidan Garhi, New Delhi 110 068, India

[3] Department of Agricultural and Rural Management, Centre for Agricultural and Rural Development Studies (CARDS), Tamil Nadu Agricultural University, Coimbatore 641 003, India

difficult working conditions. In line with a few other international innovative schemes, they term this a “non-formal apprenticeship” approach.

Keywords India · Street food vendors · Informal sector · Informal learning · Skills development

Résumé Développement des compétences dans le secteur informel de l’Inde : le cas des vendeurs ambulants – Le secteur informel domine la vie économique indienne, le développement des compétences y est donc particulièrement important. À partir d’une enquête menée auprès de 49 vendeurs ambulants de produits alimentaires dans les villes de New Delhi et Coimbatore, les auteurs de cet article démontrent que l’apprentissage informel est une forme particulièrement efficace d’enseignement et de formation professionnels. Ces travailleurs ne sont pas formés dans les structures formelles de l’enseignement et de la formation professionnels (EFP), les opportunités d’apprendre sur le tas dans le commerce familial ou dans l’emploi informel sont donc pour eux décisifs. Contrairement à d’autres études, les auteurs constatent que les vendeurs ambulants en alimentation possèdent un large éventail de connaissances, compétences et savoirs spécialisés, nécessaires pour mener leur activité qu’ils exercent avec profit. Ces compétences ne se limitent pas à préparer et à vendre des produits alimentaires, mais touchent aussi des domaines tels que la fixation des prix et le marketing. Tous les vendeurs interrogés déclarent s’identifier fortement à leur travail et en être fiers. Environ la moitié ont exprimé le souhait d’une formation complémentaire. À ce sujet, les auteurs proposent de promouvoir des structures non formelles d’apprentissage adaptées explicitement aux conditions de travail difficiles des vendeurs ambulants. S’alignant sur quelques autres projets internationaux innovants, ils appellent cette approche « apprentissage professionnel non formel ».

Introduction

Multi-ethnic India is one of the largest countries in the world and its economy is one of the fastest-growing (UIS 2011). Almost 18 per cent of the world’s population – 1.2 billion people – live in India, and the population is very young, with 30 per cent currently aged below 15 (ibid.). It is not only in demographic terms that India is growing: its economy is expanding by 6–8 per cent a year, generating an ongoing demand for labour which is likely to increase further (Majumdar 2008, FICCI 2010).

India’s economic structure, including its labour market, is characterised by a bipartite division. Alongside the formal economy and regulated labour market, India has a large informal sector which accounts for around 60 per cent of the country’s economic output and employs more than 90 per cent of all workers (World Bank 2008; ILO 2002). This economic sector and labour market is very large by international standards, and Indian policymakers cannot afford to ignore it in terms of training and labour market policy (ILO 2002; King 2007).

According to the International Labour Organization (ILO), the "informal sector" is characterised by

> extraordinary diversity […]. Informal units comprise small enterprises with hired workers, household enterprises using mostly family labour, and the self-employed. Production processes involve relatively high levels of working capital as against fixed capital, which in turn reflects the relatively low level of technology and skills involved (ILO 1998, p. 167).[1]

The last aspect – the low skills level – is of particular interest to educationalists and is generally accepted in Indian society as a given. For example, the press release announcing approval of the *Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act* (PIB GoI 2013)[2] states: "Street vendors are often those who are unable to get regular jobs in the remunerative formal sector on account of their low level of education and skills." In the global context of developing vocational educational and training (VET) as a whole, the question of the form and structure of learning processes is, moreover, becoming increasingly important with regard to India (Singh 2001; World Bank 2008; Agrawal 2012).

We question, however, whether the level of skills of the informal sector workforce in India really is in fact confined to "low skills". In addition to this question, it is also appropriate to ask how those employed in India's informal sector actually acquire their skills. It can be assumed that a particularly high proportion of learning in the informal sector takes place outside formal training structures (World Bank 2008).

In this context, we understand skills development as the

> acquisition of practical competencies, know-how, and attitudes to perform a trade or occupation in the labour market, either through formal public or private schools, institutions or centres, informal, traditional apprenticeships, or non-formal semi-structured training (King and Palmer 2010, p. 136).

This definition clearly shows that skills development need not be confined to formal, structured courses of training but may also take place in unstructured and unplanned contexts.

In this context, our conceptual framework is that of formal and informal learning, a framework which is recognised in India and internationally. However, we supplement this approach with a third dimension – non-formal learning – which was first introduced as far back as the 1960s (Coombs 1968) and is now promoted with minor differences in detail, for example, by the European Commission (2000) and UNESCO (UIL 2012):

[1] For a definition of "informal economy", see ILO 2002, pp. 11–13.

[2] The Indian *Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act* (GoI 2014) finally came into force in May 2014. The network of the National Association of Street Vendors of India (NASVI), founded in 1998 and registered in 2003 under the Societies registration Act, had been lobbying for the protection of its members' rights for many years. Unfortunately it still needs to be put into practice both in New Delhi and in Coimbatore.

Formal learning takes place in education and training institutions, leading to recognised diplomas and qualifications.

Non-formal learning takes place alongside the mainstream systems of education and training and does not typically lead to formalised certificates. Non-formal learning may be provided in the workplace and through the activities of civil society organisations and groups (such as youth organisations, trade unions and political parties). It can also be provided through organisations or services which have been set up to complement formal systems (such as arts, music and sports classes or private tutoring to prepare for examinations).

Informal learning is a natural accompaniment to everyday life. Unlike formal and non-formal learning, informal learning is not necessarily intentional learning, and so may well not be recognised even by individuals themselves as contributing to their knowledge and skills.

While the purpose of this article is not to explore discrepancies in definitions and approaches (see OECD 2007), we find this tripartite division useful to analyse the status of skills and skills development in the informal sector in India.

Existing research on skills in the informal sector

Existing research in this area focuses overwhelmingly on the distinction between formal and informal learning, but we restrict ourselves here to mentioning recent findings of direct relevance to our topic.[3]

For example, one of the most extensive existing studies is Madhu Singh's research on skills development in the Indian informal sector. She analysed the framework for and forms of informal learning in eight different sub-sectors of the informal sector in New Delhi (Singh 1996). In interviews with more than 100 individuals, she discovered that their scope for both economic and social development was very restricted (Singh 1998), and that those running small-scale businesses had very little formal education and training and faced a shortage of capital. Singh (ibid.) found that they had particular need of problem-solving skills and social skills. But technical skills were also important, even if these individuals, unlike those working in the formal sector, were less likely to be reliant on technology and more likely to be reliant on their own resources. On top of this, she identified skills in financing, procurement, sales and marketing, areas in which the particular importance of learning outside the formal training system was evident and in which a significant informal training system could be identified.

Other studies have focused on other detailed aspects or specialised groups. Since these are of minor relevance to our research topic, we give just a few examples here, but refer back to them in the discussion of our findings.

Claire Noronha and Tanuka Endow (2011) interviewed skilled workers in four different occupations in the Indian states of Rajasthan and Madhya Pradesh about

[3] For more details on earlier findings, see Krishna (2005).

issues relating to informal training. Their work brings out the major significance of informal learning in a situation in which the cost of formal training, and the loss of earnings arising from it, are seen as too high by workers in rural areas. It also highlights the importance of knowledge and skills transfer in family businesses operating in traditional sectors.

Venni Krishna used five case studies to explore a number of informal learning projects in northern India, finding in particular a "lack of provisions in formal institutions for training workers in the informal sector", a "low level of skills in traditional apprenticeships in the informal sector" and the "weak role of universities and S&T [Science and Technology] institutions" (Krishna 2005, Table 6, p. 210).

Research by the Swami Vivekananda Youth Movement (SVYM 2011) among 35 masons and tile-layers in Mysore and Bangalore found that informal learning in this sector was based on observation and imitation, instruction in working processes by experienced overseers, and simple trial and error. The study also highlights the fact that the skills formation process lasted between three and five years.

Finally, Jamie Barber (2004) studied learning processes in a garage employing 15 people in the rural area of Darjeeling. In this case, employees received only rudimentary formal training; informal learning was, however, observed to be strongly developed, particularly the acquisition of tacit knowledge, though there was a lack of reflection processes.

In terms of studies outside of India, there are a few with findings from Africa which are of interest for comparison.[4] Hans Christiaan Haan's research (2001) in Eastern and Southern Africa reinforced the finding that workers in micro and small enterprises were lacking skills and received no training at all.

Glenrose Jiyane and Britta Zawada (2013) studied the financial literacy of women entrepreneurs in South Africa. These entrepreneurs belonged to the informal sector and had low educational attainments. While assessing their business operation skills and mathematical literacy, the study found that the entrepreneurs lacked knowledge on record keeping and stock taking. Besides, the entrepreneurs had low mathematical literacy, even if they did use calculators with assistance from their children to manage large transactions. These entrepreneurs were in need of training in their place of work, and financial institutions and government agencies were ready to equip these women with required skills.

In Ghana, around 89 per cent of labour is engaged in the informal sector, and the majority among this workforce are women (Xaba et al. 2002). Another study (Palmer 2007) showed that skills development interventions in Ghana used a top-down approach, and the lack of labour market relevance was obvious. There was less follow-up after the training programme, sometimes it was totally absent. The study argued that the skills training strategy especially in Ghana needed a fresh approach, both in terms of reducing unemployment and in terms of recognising the multitude of available opportunities to train youth. The insight was that the new tactic should be gender-sensitive and pro-poor with a clear government strategy to support the informal economy (ibid.).

[4] Due to lack of space we can only select and describe some publications of high relevance for our topic from the vast number of research findings available in the field.

Street food vending in India

Street food vendors lent themselves particularly well to our research for two reasons: first, they could be singled out as a sub-group of the informal sector; and second, they have for many years represented a significant proportion of street vendors, not only in India but also globally (ILO 2002).

Because street vendors are a very diverse group (ibid.), any fruitful research approach requires us to define street food vendors more precisely, using the following internationally accepted definition of what they sell, namely "ready-to-eat foods and beverages prepared and/or sold by vendors and hawkers, especially in streets and other similar public places" (FAO 1989). Street food vending in India ranges from food without preparation to ready-to-eat food cooked on-site. The serving of such foods varies from mobile to fixed stalls (GoI 2004). Sunita Mishra (2007) found that 82 per cent of consumers in all age groups preferred street food to eating at restaurants. However, her study also found that these vendors were facing health and safety problems in terms of poor access to portable water, toilets, refrigeration and waste disposal.

It was also recognised that the street food vendors were often poor, uneducated and they lacked hygiene practices despite the good taste and easy availability of their food (Sheth et al. 2005). Thus, street foods have been perceived by some studies to be a major public health risk (WHO 2010).

The level of educational attainment of the street food vendors and skills achieved is another issue which has been studied. In their research into street food vending in Delhi, Chander Pal Thakur et al. (2013) showed that 42 per cent of their respondents had achieved only primary schooling and 24 per cent were illiterates. About 64 per cent of these vendors did not have permanent residence permits. Hence the Government of India recently enacted the *Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act* (GoI 2014), which provides the opportunity to regulate street vending by establishing Town Vending Committees to identify existing street vendors and to accommodate them in vending zones.[5]

It is noteworthy that, to our knowledge, there is no comprehensive published academic research in India on on skills transfer, training, skills and knowledge ultimately acquired by the group we have identified through informal learning practices.

Research questions and method

Our aim here is also to represent a broad understanding of skills development, so that by considering the socio-economic framework, we can make a rich and meaningful analysis of our data. To do this, we use Amit Mitra's (2002) approach to skills formation in the informal sector in South India. This ILO study clearly shows

[5] More detailed studies exist for other countries, including Bangladesh (Keck et al. 2012), Viet Nam (Hiemstra et al. 2006) and Taiwan (Sun et al. 2012). However, these studies are of very limited relevance to the Indian context because socio-economic conditions vary from country to country and also because some of the studies were based on different research questions.

that, in a context which is typical of the informal economy, informal learning cannot be defined solely by analysing opportunities for learning or by assessing the skills which individuals acquire as a result. Rather, these findings need to be seen in a broader context which takes into account the socio-economic background and the relationships between actors. Singh took this approach to investigating India in her work (1996, 2000), which also indicates that analyses need to consider particular occupation-specific skills and the technical and organisational framework for learning (Singh 2000).

As a result, our research combines different but connected aspects of the skills transfer, skills identification, practices, innovation, working capital, external stimuli and training requirements of street food vendors in India. Our study seeks to identify the working conditions, challenges, and support and training requirements of street food vendors and, in particular, to understand the vendors' situation in relation to areas related to status, business operations, conditions, skills and training needs.

Research questions

(1) Where do individuals acquire their knowledge of the skills required in the informal sector?
(2) How does informal learning take place in informal settings?
(3) What kind of skills do individuals have, and to what level?
(4) How are individuals running their businesses?

Method

We addressed our research questions by developing semi-structured questionnaires which were administered as interviews underpinned by guideline questions. Some of the questions had a quantitative dimension while others were more qualitative. The survey was biographically contextualised by asking informants to look back over their life history and accumulated experience (Wengraf 2001). Respondents were also questioned at their place of work, which meant that it was to some extent possible to observe their working environment and working processes and to undertake at least some degree of verifying interviewees' statements. This procedure is particularly appropriate for depicting the multi-layered nature of our set of research questiosn and is conventionally used in this research area (see, for example, Singh 1996).

The guideline questions we developed focused on person-related data, data about opportunities for and forms of learning, and the socio-economic context; there were a total of 60 questions in five thematic blocks, and skills were "bundled" into the areas of purchasing (including product knowledge), manufacture (including knowledge of recipes), hygiene, sales and marketing, and costing. Individual detailed questions were asked in such a way that the interview findings generated clear data not just about respondents' awareness of the existence of specialist knowledge (such as standards of hygiene), but also about concrete technical and process skills. Furthermore, the questions contained elements of invitation to

describe their tasks and daily routine. Thus we got at least some evidence on the real competence acquisition and the knowledge and skills. We visited our respondents at their workplace and conducted the interview while the food processing and distribution went on. Even if a more extensive observation (in terms of a conventional research method) was impossible to implement (due to limited research resources), we got at least some impression of the working and informal learning environment.

Because of our limited research resources, we selected two regions for investigation which differed in size and cultural context. One was the megacity of New Delhi in northern India, and the other was the medium-sized city of Coimbatore in the southern state of Tamil Nadu. Interviews were conducted in the local language by teams fluent in that language who had previously been trained and briefed by us. Interviewees were selected at random on the basis of local knowledge of locations where street food vendors operated.

It was proposed to have a sample size of 20 street food vendors from each city, since we expected to spend considerable time with each respondent and to have more in-depth observations and discussions. In New Delhi, only 19 out of 20 responded and cooperated, while in Coimbatore, 10 additional vendors voluntarily came forward to be interviewed and provided more interesting information, resulting in a total of 30 respondents.

The empirical saturation (Strauss and Corbin 1990) reached in the project gave evidence about an adequate number of cases.

Interviews were recorded and partially transcribed as well as being routinely translated into English. The structuring and aggregation of the data and interpretation of the findings were based on the dimensions and areas developed as part of the question design process.

Results and discussion

To obtain an initial overview of the socio-economic framework in which our interview partners operated, we extracted quantitative data (shown in Table 1) on the basis of statements made by the interviewees themselves.

Respondents from all age groups were included in our survey, enabling us to reflect a wide variety of training backgrounds. It emerged that the street food vendors we surveyed were typically representative of the age structure in large parts of the informal sector: other studies (mentioned in the introductory section of this article) also show that India's informal sector spans a very wide age range.

In terms of gender, it is striking that while in New Delhi the profession is clearly male-dominated, street vendors in Coimbatore include both men and women. These contrasting findings also correspond with those of other studies (mentioned earlier) of the informal food preparation sector, in which the participation of women and men differs from region to region.

The proportion of interviewees with literacy skills in our study was high and above the literacy rate for India as a whole (UIS 2011). It was also striking that formal general education qualifications among our respondents were relatively high

Table 1 Educational and socio-economic background of interviewees

	New Delhi*	Coimbatore**
Age range of interviewees	18–61 years	25–60 years
Gender	100% male	70% male
Literacy rate (%)	89%	97%
Formal educational attainment (highest level)	16%	3%
Primary education (Standards 1–5)	26%	27%
Upper primary education (Standards 6–8)	11%	50%
Secondary education (Standards 9 and 10)	21%	17%
Higher secondary education (Standards 11 and 12)	21%	0%
Graduate (course/degree obtained)		
Caste membership	53%	40%
General	37%	54%
Other Backward Class	0%	3%
Scheduled Caste	10%	3%
Scheduled Tribe		
Self-employment rate (business owners)	63%	100%
Business experience	32%	66%
Less than 10 years	42%	27%
11–20 years	26%	7%
More than 20 years		
Average family income per month	Rs 36,000	Rs 21,000
Average working business capital per day	Rs 1,800	Rs 2,000
Average sales volume per day	Rs 3,000	Rs 2,700

* $n = 19$; ** $n = 30$

compared with the general education level in India (World Bank 2008). This contrasts with other studies (mentioned earlier) of the informal sector, which tend to show that educational levels in this sector are lower than the national average. It should be borne in mind, however, that both our interview locations were in urban regions and did not, therefore, reflect the generally lower levels of formal education in rural areas. It was also striking that the interview sample in New Delhi had widely differing levels of education: some had very little basic education while others had degrees. By contrast, the sample in Coimbatore was markedly more homogeneous in terms of formal qualifications: more than two-thirds of those interviewed had an upper primary or secondary qualification. Overall, however, it was clear that many street food vendors had completed some formal general education and had acquired at least basic reading, writing and numeracy skills. Since pre-vocational education plays only a marginal role in India's general education system, it can be assumed that it is not giving people the skills they need to earn their living.

In terms of caste membership, our sample was almost evenly divided between the general castes and the other castes. At least for our sample, therefore, it may be said that street food vendors in New Delhi and Coimbatore do not comprise solely members of the lowest and historically discriminated castes.

While only two-thirds of our respondents in New Delhi ran their own stall, all the respondents in Coimbatore were self-employed.

We also found differences in terms of business experience. Respondents in New Delhi had been working as street food vendors for a markedly longer time than those in Coimbatore. Additional qualitative findings are needed to explain why this should be so, and these are discussed below.

The figures cited by the interviewees for average monthly income are in keeping with those given in other surveys of the same sector (Rani and Galab 2001; Singh 2001, p. 264). The divergence between New Delhi and Coimbatore – in excess of 70 per cent (see Table 1) – can be attributed to markedly higher prices and living costs in the capital. The lower capital costs in New Delhi (also shown in Table 1) can be explained largely by the fact that the type of food sold there involves higher profit margins.

Vocational training

Table 2 provides an overview of the degree of participation in formal learning in the VET sector and specifically in the occupational field of street food cooking, derived from the quantitative data we gathered.

The data provide striking evidence that only a very small proportion of street food vendors surveyed in New Delhi – and none in Coimbatore – had received any kind of formal vocational training as defined above. Moreover, less than half of the few who did have experience of training within the formal VET sector had taken any kind of examination, while none had any kind of certification. It is also interesting to note that the interviewees had virtually no knowledge of what formal vocational education and training might be available to them. Responses to our specific question about health examinations were identical in both cities; the vast majority had not undergone any health examinations.

In relation to our research questions, we are therefore able to conclude that street food vendors – at least in New Delhi and Coimbatore – acquired virtually none of their skills through the formal vocational education and training system.

This conclusion offers initial confirmation of the official findings of a low skills level in the informal sector (Sheth et al. 2005; Thakur et al. 2013). Space constraints

Table 2 Participation in formal vocational training

% of "yes" responses	New Delhi*	Coimbatore**
Have you received any formal training?	11%	0%
Have you taken any post-training test or examination?	5%	0%
Have you received any certificates on completion of training?	0%	0%
Are you aware of any skills building programme/vocational education in the area of the skills required to run a street vending business?	5%	0%
Have you undergone any health examinations	5%	1%

* $n = 19$; ** $n = 30$

prevent us from giving a detailed account of India's formal VET system here, but a brief outline underpins our interpretation of our findings. India's VET system is relatively under-developed in quantitative terms, has low status, and reaches only a small proportion of the population (World Bank 2008; Agrawal 2012). Publicly funded Industrial Training Institutes (ITIs) and privately funded Industrial Training Centres (ITCs) form the core of the system and offer formal vocational training through provision of schemes ranging from short courses to comprehensive training (Venkatram 2012; Singh 2012). These institutes consistently lack contact with businesses, however, and many are ill-equipped and/or have a poor quality of teaching staff (ILO 2003).

In terms of our research design, it is important that a distinction is maintained between non-formal and informal learning. This requires more detailed analysis of further data and the information provided by the interviewees in response to a range of qualitative questions. Here are two sample portraits of street food vendors, one from New Delhi and one from Coimbatore.

Lala Ram from New Delhi

Lala Ram, 58, runs his business at Saket Community Centre. His father started the stall 19 years ago and he worked with his father from an early age. The entire family works in the business. The food is prepared by his wife at home, and he and his nephew sell it. No written accounts are maintained. Lala Ram has no other workers apart from his family. The stall is open every day of the week from 10 a.m. to 10 p.m. They have not undergone any training for this and do not want any. He says he is willing to teach someone how to cook if they want to learn from him. The snacks are sold at regular market prices. The price may vary according to the cost of raw materials.

Om Pal from Coimbatore

Om Pal, aged 42, is a native of Uttar Pradesh and runs a stationary stall at Lawley Road, Coimbatore. He is educated up to Standard 8 and speaks three languages, including English. His wife encouraged him and taught him to cook a range of fast food dishes commercially. He started his business in 2006 and has a branch at another commercial area run by his son. He was previously working in a local sweet shop and has eight years' experience. His former employer taught him to prepare 320 different types of sweets; mostly, he acquired his skills through observation and "learning by doing". He records his daily transactions in his diary. He has no loan repayment obligations. He does not have a licence. He is happy that his customers believe that the food he serves is hygienic and his prices are cheaper than those of the competitor stall in his locality.

The biographies of our interviewees and their responses provided us with very clear answers to our research questions, with no major differences between New Delhi and Coimbatore, the two locations where we conducted our survey.

It emerged that skills development takes place almost exclusively through informal learning processes. Even non-formal learning was mentioned only very rarely, despite explicit enquiry, and was then mentioned solely in the context of

hygiene training by one respondent, Gunasekaran in Coimbatore, who had undergone a short course of training in preservation techniques with the Tamil Nadu Food Safety and Administration Department.

Learning by doing is, therefore, the main learning method for street food vendors, with two informal learning sites involved: (1) the family, in which vendors learn to process food and prepare dishes either within their own household or within a family business run by their parents or other family members; and (2) other restaurants, street food stalls or food production plants where the informants may have worked (or are still working). In the latter case, the know-how acquired in another business is then used by vendors to open their own business; in other words, knowledge transfer generates competition. In the family context, by contrast, training is mostly used to support businesses run by family members or, sometimes, loosely associated businesses within the same market segment in other parts of the region.

It is striking in this context that family members are frequently involved in the value creation chain in the street food sector, since food preparation is something which is often done in a domestic environment. Street food businesses are, therefore, often family businesses.

During the interviews, we observed that a majority of the street food vendors were using mobile phones, not for business or education but for private communication, and a few used calculators for accounting.

Our interviewees were able to give us only limited information about their precise learning opportunities and learning processes: they were often unaware of the concept of workplace learning, or else because their learning had taken place in a random and unstructured way, they could not identify specific learning processes. The few explicit comments we received were to the effect that the respondent had observed an expert/master or had received instructions and tips from an expert/master on how to do the work. It was also stressed that opportunities for learning were situation-dependent and/or were determined by the requirements of the job. These comments provide further evidence of the fact that street food vendors acquire their skills through informal learning processes.

While interviewing the street food vendors, we observed that whatever they had learned was from their previous job experience where they started working as cleaner or assistant cook. Later, after learning, they decided to start a small venture of their own. We found that most of the street food vendors were taking care of hygiene and good quality ingredients because they wanted to improve and sustain their business.

In terms of the skills level achieved, we were astonished by the relatively detailed technical and process-related knowledge our interviewees had. All respondents demonstrated wide-ranging knowledge of the characteristics of the raw materials they were using and of the organisation and conduct of the preparation process. As our sample cases above also demonstrate, a core requirement is that dishes are prepared hygienically and that they are tasty, so that vendors can compete economically and make a decent living.

Shankar talked about the significance of maintaining quality and said:

> We do not store the food items, because everything is prepared fresh quite enough, so that it can be utilised on the same day. Otherwise we have to throw it, and to maintain the quality we do not prefer preserved food items.

Interviewees also sought to set themselves apart from their competitors through specific preparation methods, through standards of service (such as rapid preparation of dishes) and through their central location, for example near transport interchanges. All interviewees were aware that these elements made up the essential conditions for economic success. Peter in Coimbatore summed it up when he said, "I should be having good knowledge and techniques to cook the food and any mistakes in preparation will lead to losing of my customers."

We were, however, also interested in wider-ranging skills, and it was clear that our interviewees' knowledge of strictly limited business processes went hand in hand with wide-ranging knowledge and skills in relation to procuring raw materials (price negotiations, selecting suppliers, etc.), costing retail prices in the context of production costs and the competition framework, and sales and marketing. Many of these skills were used only indirectly – for example, few of our respondents had a formal bookkeeping or accounting system – but their actions were clearly underpinned by experience, and there was a rationale for them. It is, therefore, possible to assume the existence of some kind of tacit knowledge which is often generated in informal learning settings (Attwell et al. 1997). We were astonished not only by respondents' technical knowledge but also, in particular, by their basic economic understanding of how profit can be forecast and then generated by adding value to raw ingredients though preparation and through service via portioning and packaging. The interviewees were also very aware of complex economic concepts, such as rational pricing that reflects the full range of cost factors and the competitive situation.

Interim conclusions from the quantitative analysis are broadly in keeping with the studies referred to above (e.g. Singh 1998) and suggest that there is a clear link between work in the informal sector and the model of informal learning which predominates there. At the same time, however, our data clearly diverge from the generalised assumption that the informal sector is characterised by only low skills levels. The street food vendors interviewed in our study have a broad range of the existential skills their occupation requires and are able to deploy these profitably.

It was also striking in all the interviews that, despite the low social status of the informal sector and, in particular, of street vendors, our interviewees had a marked professional ethos and carried out their work proudly and with great dedication. This self-confidence is so high that around half of all those interviewed saw no need for further formal skills training: they felt they had reached "master" status, their business was successful, and they had learned what they needed to either within the family context or from rival vendors. The remaining half, by contrast, acknowledged their need for training to further develop their "master" status or to expand into other business areas. As with our earlier findings, there were no major differences between the two survey locations.

Of particular significance for our study were the difficult circumstances under which street food vendors operate. As well as the general difficulties facing all street vendors, such as the lack of permanent stalls, frequent under-capitalisation, the need to rely on outside finance at extortionate rates, and problems with obtaining a licence from the authorities, food vendors are subject to further challenges. It is, for example, very difficult to ensure quality and hygiene when you are preparing and

selling food in a hot and dusty environment with a lack of space and inadequate infrastructure, a situation which street food vendors have to tackle on a daily basis using their experience and improvisational skills.

Conclusion

Our study shows a clear context of informal learning within an informal economy, which is broadly in line with other researchers' findings. The reasons for "learning by doing" in informal learning settings cannot be attributed solely to the economic unavailability of alternatives (the need to continue to earn) or a complete absence of general education. Our respondents all demonstrated proficiency in basic skills and did not cite the need to keep earning their living as a decisive factor in their occupational choices. The main obstacle to formal learning is, rather, that life as a street food vendor seems generally to be characterised by an uncertain business environment (inadequate capital, licensing difficulties, no permanent location and so on) which either makes it impossible to invest in formal learning or makes such investment risky in terms of the return. Narayanan from Coimbatore summed this situation up:

> Though I have been doing this business for the past twenty years, my life is still insecure as I don't have any permanent stall and no permanent customers and people nowadays doubt about the quality of food served. The business is so uncertain and I have no other option.

These findings are confirmed by findings from other studies in the same sector. Rajendra P. Mamgain and I. C. Awasthi, for example, conclude that

> Training of such workers is extremely difficult, primarily because of their meagre resource base and rapid turnover. Skills upgradation [*sic*] and the introduction of simple technology or improvements in existing technology would have a far-reaching impact on their productivity (Mamgain and Awasthi 2001).

One further factor which hampers formal training is the tradition that a family business is handed down from generation to generation and that skills development happens informally within the family. This aspect is comprehensively borne out in the first of our case studies above. It is also corroborated in the words of the owner of *Vinod snacks*: "It was by chance. I entered this business because my brother and father both expired, and the entire family responsibility was on my shoulder. I was following family traditional business."

One further influence is of significance here. Noronha and Endow (2011) show that informal learning within a family context may have the advantage of protecting "hidden knowledge" from potential competitors, maintaining competitive advantage. Respondents in our study also frequently alluded to this aspect: special recipes and preparation methods were withheld from people outside the family circle to protect the specificity and uniqueness of a family's products. As a result, there was little incentive to send children to other colleagues to learn their trade.

This leads us to another aspect: our study is characterised by some limitations. Further research should include longer periods of observation to make the tacit knowledge and the informal skills acquisition in the workplace more visible and measureable. We know from many studies about the great impact of situated and workplace learning on the structure and content of skills and competencies (see for example Nunes et al. 1993; Hager and Halliday 2007; Evans et al. 2006). In our case, the main objective (which is reflected in our research questions) was to get a first access to the topic. Due to our finding that informal learning, day-to-day experience and professionalisation inside the world of work are highly relevant in the case of Indian street food vendors, we conclude that more specialised research approaches (in line with the cited approaches on work-based learning) are needed, including knowledge acquisition and the structure of aggregated skills, to improve the situation of street food vendors.

Future research might also be carried out with more ethnographically influenced methods (Ellen 1984) and with limited samples to focus on the shaping of learning situations and the framing of informal learning in this sector in India.

Finally, there are implications for training policy. Our findings clearly show that, unlike other people situated in the informal sector in India, street food vendors are not engaging in any major skills development activities offered by NGOs, at least in the locations we surveyed.[6] Moreover, only half of our sample saw the need for training or were even interested in it. However, we have learned from many studies concerning workplace learning and the formation of tacit knowledge (Attwell et al. 1997) that in many cases a more formalised learning setting is needed to structure, connect and improve already existing competencies. Shyamal Majumdar (2008) also argues in this direction by criticising the weak theoretical basis of learning in the informal sector.

This is precisely where we see major opportunities for a form of learning tailored to the specific needs of those involved. Initial and continuing training provision at the level of non-formal learning – particularly through flexible NGOs – is likely to be very popular here and to have capacity to expand (for comparison with other sectors, see, for example, Mamgain and Awasthi 2001; Singh 2012).

This tailor-made form of learning would also, in line with the definition outlined above, offer provision which operates outside the formal sector but involves explicitly planned and structured learning processes. Our survey indicates that street food vendors could be persuaded to participate if such provision were clearly oriented to local requirements (such as knowledge about hygiene, appropriate product storage or optimising supply mechanisms), and met the needs of street food vendors in terms of timing, duration and location. Specifically, it could take the form of daytime instruction or demonstrations at the workplace over relatively manageable periods of a few weeks at a time.

[6] The interventions of NGOs differ from location to location. Usually NGOs provide training either through formally approved Industrial Training Institute (ITI) courses or non-formal courses. Towards the end of the training programme, they contact employers located close to their premises to place the trained workers. The training they provide is based on the demand arising in the market. At the same time, training interventions of NGOs are restricted due to their limited capacity and the lack of proper certification, standardisation and the lack of updated curricula (NCEUS 2009a).

There is further potential in implementing new forms of learning. The existing informal workplace learning mechanisms highlighted in our study involve either learning within the family circle or informal employment in businesses outside the family. These forms of learning are often described as "informal apprenticeships" and are widely argued by various international organisations to be an excellent solution to skills formation in the informal sector (ILO 2011). Singh's study (1998), however, shows that the quality of skills development in informal apprenticeships may be very limited, for example because the business model is uncertain, activities are limited in nature, the business owner lacks teaching skills, or there is rapid turnover among external employees. We argue, therefore, that provision for street food vendors in India should link informal learning opportunities with more formalised opportunities. While the ILO approach (2011, p. 5) proposes links with formal learning provision in formal training centres, we argue instead for links with non-formal provision within/at the workplace. This strategy, which we call the "non-formal apprenticeship" approach, addresses the particular concerns of street vendors. Specifically, short courses (of a few hours' duration outside main business hours) provided by NGOs could, for example, be offered over a period of a few weeks. These courses should be run in small groups in locations with large concentrations of street food vendors and in the immediate vicinity of participants' workplaces, to preserve the authenticity of the working environment and also to avoid lengthy travelling times. In terms of content, courses would have to be geared to participants' levels of literacy and other needs. They would focus on basic knowledge and skills, such as hygiene, occupational safety, product knowledge or the basics of costing, pricing and marketing. Participants' hidden knowledge should be protected so that the approach gains acceptance amongst participants.

Ultimately, however, such provision will become more widespread only if street food vendors achieve higher legal status within the informal sector. This would include, in particular, long-term licences and the legalisation of their businesses (NCEUS 2009b), as is provided for in recent Indian legislation which has yet to be put into practice. According to the *Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act* (GoI 2014), local Municipalities in India need to form town vending committees to identify all existing street vendors, who must be at least 14 years of age, and accommodate them in proper, legally designated locations where they can conduct their business. Municipalities need to provide street vendors with certificates, which are renewable according to the Act. Since the process of identifying street vendors and providing them with appropriate street vending space and certificates is lengthy, many municipalities, especially New Delhi and Coimbatore, have to date not yet initiated the process.

We are not in a position to assess the extent to which these specific and decentralised approaches can ultimately be integrated into India's general VET policy (King 2012). We can, however, conclude that all the approaches to initiating skills development learning processes among street vendors focus on helping them improve their businesses and, ultimately, their lives.

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The authors

Matthias Pilz is full Professor and Chair of economics and business education, Director of the Center for Modern Indian Studies (CMIS) and Director of the German Research Center for Comparative Vocational Education and Training (GREAT) at the University of Cologne in Germany. His major research interests are: International comparative studies in (T)VET, curriculum research, learning and instruction research in VET.

Gengaiah Uma is Assistant Professor in the School of Gender and Development Studies, Indira Gandhi National Open University, New Delhi, India. Her major research interests include governance, gender and development, skills development and informal learning.

Rengan Venkatram is a full Professor and working in the Department of Agricultural and Rural Management, Tamil Nadu Agricultural University, Coimbatore, India. His major research interests are: Marketing management, development planning, skills development in the agricultural sector and rural development.