CHAPTER – VII

SUMMARY, CONCLUSION AND POLICY IMPLICATIONS
7.1 Overview

Notwithstanding the predication of the conventional economic wisdom that IS is a transitory one and would weather away as the forces of economic growth get reinforced; the informal continues and has proved its continuity beyond doubt in the recent history of economic development of the developing world. A critical examination of the dynamics of development practice and development theory in many of the developing countries of the world shows the inadequacy and inefficiency of the FS in realising the various dimensions of development. Whether it is employment creation, resource allocation, promotion of equity and ensuring of environmental, social and cultural sustainability; the FS on many occasion could not ensure it. On the other hand, it became increasingly evident that the IS can very well accomplish many of the cherished requirements of development in the underdeveloped world. This realisation got vindicated in the recent past when many of the developing countries embraced upon structural adjustment programmes in conformity to their subscription towards globalisation and liberalisation. The recent global economic meltdown and all the negative forces emanating from it has further strengthened the believe of the champions of the IS that informal is universal and integral and will remain so at least in developing countries for a considerable period of time hereafter.

The over ridding realisation in the developing countries in the context of their developing dynamics is that the “informal is small and it is beautiful”. Its beautiful because it’s a necessity, its often efficient, its socially, culturally and environmentally sustainable, it’s a catalyst of equity and above all in the context of the recent economic meltdown, it’s a saviour of the economics.
In our thesis we made an humble attempt to examine one of the sub-sectors of the ‘urban informal’ economy that is “Informal Milk Producing Sector” (IMPS) in a growing north-eastern city of India that is Guwahati in the context of some of the parameters of development which we have just outlined above. To be specific these parameters happen to be economic efficiency, equity (in terms of employment creation) and sustainability (i.e. continuity, complementarity and supplementarity). We have also examined some specific problems that this sector faces e.g. finance, linkage (absence or prevalence of it).

7.2 Findings

The important findings of this study are given below:

The sampled IMPUS in the Guwahati city of Assam exhibit most of the features that are supposed to characterise the IS units in general. However there are also some deviations from the typical widely discussed characteristics of the IS. Majority of the IMPUs (99%) are proprietary firms. All the enterprises operate from fixed premises. A sizable number (44.5%) of them operate from rented premises and around 39 per cent enterprises operate from encroached government land. Non-maintenance of accounts, non-registration of the units is some of its characteristics found. The average age of the sample units is around 32 years.

Majority of the sample units (64.5%) do not own their pucca cow-shed structure and around 91 per cent sample IMPUs have the electricity connection. The average distance of location of the sample IMPUs from the main road is 1.283 kms. The entire sample IMPUs own some type of tools, machines, whose average value per sample unit is of Rs. 14253. Majority (38%) of the enterprise own fixed capital assets with in the range of Rs. 2 lakhs to
Rs. 6 lakhs. The IMPUs are very much fixed capital intensive. Fixed capital and assets forms 98.51 per cent of its productive capital base. In respect of working capital, majority of the sample units (26%) operate with working capital within the range of Rs. 6 thousand to Rs. 10 thousand. The average value of fixed capital and working capital employed per unit and per work force of the sample IMPUs are worth of Rs. 693973, Rs. 10484.27 and Rs. 117324.26 and Rs. 1772.49 respectively.

Average size of employment in the IMPUs is around 6 persons. Hired workers constitute about 21 per cent of the total employment size in the IMPUs. This casts doubt on the general observation that the IS units are mostly managed by household members. Employment of children below the age of 14 forms 6.68 per cent of the total employment which shows, presence of child labour in the IMPS. There is negligible size of female participation (20.79%) in this sector. Majority of the participants speak ‘Assamese’. Nepali participants form 96.04 per cent of the total number of participants in the sector. Assamese and Bihari participants form only 1.98 per cent each of the total number of participants in this sector. Capital intensity and size of the IMPUs are significantly positively correlated.

Output and turnover per IMPU and per work force are worth of Rs. 729441 and Rs. 123328.54 and Rs. 729369 and Rs. 123308.37 respectively. Output level in the sector is significantly positively correlated with education level and family size of the entrepreneurs. Likewise, total turnover and total gross profits of the sector is significantly positively correlated with education level and size of the family of the entrepreneurs. Gross value added per rupee of fixed capital and per rupee of productive capital (excluding cattle population value and imputed value) are 2.21 and 1.91 and excluding cattle population value
and including imputed value, the gross value added per rupee of fixed capital and per rupee
of productive capital are 1.41 and 1.22 respectively. On the other hand, the value added per
work force of the sample IMPUs excluding imputed cost is worth of Rs. 24927.40 per
annum and including imputed cost is worth of Rs. 15873 respectively.

There is dominance of male entrepreneurs in the sample. The percentage of male
entrepreneurs is 96.5 per cent of the total entrepreneurs. Majority (34.65%) of the
entrepreneurs are having low level (primary level) of education. The average family size of
the entrepreneurs of the sample IMPUs is 6.40 persons. The sample mean age of 48.9 years
for the entrepreneurs reflects the fact that the access of the young to own IMPUs is
restricted. So far as skill formation is concerned, majority (93.56%) of the entrepreneurs
have learnt their basic skill through hereditary occupation. Earning level of the entrepreneurs
is positively governed by their educational levels as well as family size. Another important
characteristic of the entrepreneurs of the sample IMPUs is that majority (62.38%) of the
entrepreneurs belong to other (general) casts and 92.3 per cent entrepreneurs are migrants
from Meghalaya state.

Lack of credit emerges as the most important constraint faced by majority (92%) of
the IMPS entrepreneurs. All but all entrepreneurs depend upon their own sources of finance
for meeting their working capital and fixed capital requirements, but friends and relatives
play an important role in this case. Majority (42.5%) of the sample IMPUs depend on
friends and relatives for their start up and fixed capital. Informal sources of finance
dominated by money lenders also play an important part in proving credit to the IMPUs for
meeting their working capital requirements and here the percentage is 17.5 per cent of the
total sample IMPUs. FS financial institutions provide finance to limited number of enterprises. Majority of the IMPUs are indebted. Although around 92 per cent of the enterprises need credit for expansion and operation, majority of them do not seek any loan from the banks (FS financial institutions) mainly because of complicated lending procedures of the banks and their insistence on fixed collateral requirements. When about 92 percent of IMPS enterprises need FS credit and are prepared to avail it, and when 17.5 percent of IMPUs have borrowed from money lenders at an average annual rate of interest of 72 percent and when average turnover is much higher in enterprises having access to credit in general and to FS credit in particular than the average turnover of units with out any access to credit; non-availability of institutional credit to them presents a paradox. This is mainly because of the distortions in the views and lending practices of the banks.

Majority (64%) of the IMPUs are indebted. IMPUs having entrepreneurs with higher education level are having better access to formal credit institutions and also are having more loan outstanding. IMPUs without hired worker are having little access to FS borrowings. On the other hand IMPUs having at least one hired worker employed continuously are having a major share in FS credit. Hence the IMPUs are segmented on the issue of access to FS credit. The larger the size of the firm/enterprise the more is the access to FS borrowing.

Direct forward linkage of IMPUs with the FS through the provision of sale of products/services is very weak. IMPUs mostly sale their final products/services directly to the IS whose share is 98.62 per cent. Therefore, direct forward linkage is found to be strong with IS. Direct forward linkage through the provision of ‘extended subcontract’ is also
found. The forward linkage between IMPUs and FS (co-operative Societies) is too weak (its share is only 1.38 percent of the total products/services sold).

IMPUs having direct backward linkage with the FS through the provision of purchase of raw material inputs/fodder concentrate are almost non-existent. In respect of purchase of medicine and health care services for cattle population, whatever the direct backward linkage exists with the FS, it is too weak and its share is only 0.54 percent and 11.11 percent respectively. So far as direct backward linkage with regard to credit supply is concerned, the direct backward linkage for supply of credit input with the FS (SBI) is stronger to such direct backward linkage with the IS, yet the latter is not that much weak.

Markets for purchase of important raw material inputs by the IMPUs is very much localised as 100 percent of the IMPUs purchase their main raw materials within the Guwahati city. Only in case of green grass, 12.57 percent enterprises of the total sample IMPUs make such purchases outside the city exclusively and 45 percent IMPUs of the total sample units purchase green grass both from within the Guwahati city and outside the city.

7.3 Conclusion and Policy Implications

Our study of IMPS in Guwahati city of Assam shows that these enterprises confirm to a good number of observed characteristics of IS establishments as pronounced in a number of studies undertaken by a large section of scholars and institutions. These characteristics are (i) single ownership (ii) non-registration (iii) non-maintenance of accounts (iv) recent origin (v) cent percent operation from fixed premises.
There are of course certain findings as predominance of hired workers and minimum capital base especially fixed capital and assets, which run contrary to commonly observed characteristics of the IS enterprises. However, overall conformation to the commonly observed characteristics of IS enterprises; do provide a sufficient working definition of urban IMPUs.

The next question is about the role that IMPS Plays and is expected to play in the process of economic development. The question especially the second part of it assumes importance mainly in developing countries where a large number of them have initiated the process of economic liberalisation in late 1980’s and early 1990’s. The immediate fall-outs of such exercises are (i) reduction in the size of public sector employment and/or (ii) slowing down the process of labour recruitment in the public sector. This coupled with the fallouts of the ongoing urbanisation process and dynamics of population growth in these countries, makes the existence of the IS (thus its various sub-sectors) both a necessity and a reality. Such a reality is increasingly being accepted these days primarily on account of its increased employment creating potentialities. Further in the context of the recent global meltdown, IS and its various sub-sectors like informal milk producing one, hold a ray of hope for the developing economics as they can absorb a number of FS retrenched and thrown out workers in the context of ever increasing demand for milk in urban areas of developing countries. The sector often proves its efficiency vis-à-vis the FS. In our present study with respect to labour productivity, requirements of capital per unit and per employee, the IMPS compares better vis-à-vis the FS. However with respect to capital productivity the dust is yet to be settled. In our present study also the capital productivity is slightly higher in
the FS vis-à-vis the IS. However, those who term the IS as unproductive and inefficient, forget a reality that this sector faces a historical neglect and discrimination by policy makers and planners in government in such countries. There is no denying of this point and more so in the context of the recent global meltdown.

This sector now needs to be developed. What should then be the strategy? IMPUs as we have seen in the present study and so also in other such studies vary with regard to their problems and characteristics, implying thereby that the sector is having a lot of heterogeneity. There are of course a number of common characteristics and problems. An uniform policy prescription therefore may not be of much help for the growth of this sector.

To realise the full potential growth of this sector, first of all, the strengths and weaknesses of this sector are needed to be understood and evaluated properly. As we see in our study, the major strengths of this sector are its flexibility, its higher employment generation capacity with lower amount of capital base, family labour base, its freedom from official rules and regulations and above all its own informality in every sphere of its operation beginning from labour relation to marketing arrangement. Public policy should aim at preserving and supplementing these strengths of the IMPS, rather than destroying them. Our study also brings forth some weaknesses of this sector.

The sector as a whole suffers from a number of structural deficiencies in the input front. These are non-availability/scanty availability of institutional finance, and purchase of raw material inputs at a premium. Lack of finance has universally been stated as one of the most important constraint. Our study also shows it as most important constraint. As access to formal financial institutions is limited, they borrow heavily from the money lenders at a
very high rate of interest (72% per annum). Some are compelled to reduce their output levels implying thereby the creation of ‘unutilised capacity’. This affects negatively these units’ productivity and value added through increase in cost of production. Our study reveals that the inaccessibility of these units to formal finance is not due to their risky or uncertain conditions of production but because of the malfunctioning of the lending policies of formal financial institutions especially the public sector banks. Since IMPU owners require flexibility and informality in their credit requirements, the FS banking practices cannot conform to these qualities. Hence a separate micro business finance corporation on the lines of SIDBI should be created which should imbibe all the flexibilities of informal lending institutions.

In addition to credit, the state should also undertake programmes for entrepreneurial development, skill up gradation, technology updating, marketing arrangement, insurance facility and provision for extension services to the IMPS.

The IMPUs have been facing an important problem that is non-existence of an organised and suitable market for sale of their products/services. Lack of an organised market universally been stated as most important constraint in the development of IMPS. Our study also shows it as one of the important constraints. The nature of direct forward linkage in respect of selling the products/services of IMPS is very strong with the IS causing exploitation of IMPUs and therefore hindering their development. So the state government should come forward to make a provision for an organised market for the products/services of the IMPUs and monitoring of it.
Entrepreneur and entrepreneurship is a dynamic force. The entrepreneurs, therefore not only launch a venture for creation of new small enterprises (in respect of this IMPS) but also contribute to the objectives of employment creation, output growth, technological upgradation, improvement in the quality of production and supply of goods at a reasonable price to the customers. Development of entrepreneurship and acquisition of skill and graduating to entrepreneurship through institutional training/arrangement can create an environment for bearing of risk and uncertainty in productive activities like dairy enterprises. Our study reveals that majority (93.56%) of the entrepreneurs of IMPS have acquired entrepreneurship and graduating in this field through hereditary practices. As a result, the entrepreneurs of the IMPS are unable to apply new technology for increase of production and skill upgradation which ultimately affect the profits of the entrepreneurs. To develop the IMPS, the state government should take effective step for providing training for entrepreneurship development, skill up-gradation and updating technology, to graduating IMPS entrepreneurs and other unemployed youth in this field free of cost. Hence, on the lines of ‘Indian Institute of Entrepreneurship’ (IIE) and ‘State Institute of Rural Development’ (SIRD), a separate training institute should be created.

The spirit of cooperation among the IMPS entrepreneurs in actual sense should be promoted. Our study reveals that there are total eight Cooperative Societies constituted by the IMPUs, but in terms of activities they do little. As a result the spirit of doing something good together by all the IMPS entrepreneurs of Guwahati city is absent. So the entrepreneurs of the IMPS are suffering from the institutional infrastructural problems like procurement, processing, marketing and product enhancement services. Therefore all the IMPS
entrepreneurs should meet together on the same platform and form a strong conglomeration of “Dairy Cooperative Society” on the lines of Gujarat and Maharashtra States. The state government should come forward with the positive and constructive attitude to organise and form a mega dairy cooperative society by the IMPUs and should facilitate the provision of credit facility from FS financial institutions at low rate of interest and also technical assistance so that the ‘Society’ can create physical and institutional infrastructure for procurement of their products/services (i.e., milk), processing, marketing and production enhancement services for all round growth of the IMPS.

Provision should be created for extension services like insurance facility, veterinary services (related to cattle health care) and credit cards to IMPS entrepreneurs. Since cattle population is a typical kind of fixed capital of the IMPS entrepreneurs, so the lives of the cattle population of the IMPUs should be covered by the insurance. In our study it is seen that only the lives of that cattle population which are purchased by taking credits/loans from the FS financial institutions (here SBI only) are covering the risk by the insurance agencies and the others are not covered by insurance. The state government should make provision for insuring all live cattle population of the IMPUs of the IMPS at a low premium rate. For this purpose, the government should make a tie-up (i.e., contract) with the ‘National Insurance Company’ for covering the lives of cattle population by insurance policy providing assurance of avoiding risk and uncertainty for the loss of the lives of cattle population. So far the backward linkage effect with respect to input services are concerned, it is seen from our study that the direct backward linkage of the IMPS with the FS in case of veterinary services (i.e., medicines for cattle and services and advices from veterinary
doctors, compounders and field assistants) is very weak. Proper and sufficient veterinary services are required for the development and efficient functioning of the IMPUs. Thus the state government should create a separate cell/wings in the government veterinary hospitals and veterinary sub-centres for the IMPS and also an emergency veterinary services on the lines of ‘Mritunjay’ scheme which is instituted for human beings. On the other hand, to develop the IMPS, the state government should make provision of ‘Dairy Credit Card’ for the entrepreneurs of the IMPUs on the lines of ‘Kisan Credit Card’ through which the entrepreneurs of the IMPUs can avail loans/credits from the formal financial institutions wherever its necessary.

The linkage pattern between the IMPS and the FS should be analysed carefully. If the IMPUs operate in an independent environment, they should be treated differently from the IMPUs which operate in an environment of dependence with the FS. In case of a dependence relation, it becomes necessary to analyse the nature of linkage patterns to see if such a relationship is exploitative or benign. Accordingly, the set of public policies should be tailored to check this exploitative nature if present, and to encourage the benign dependency when and wherever found. Our field study shows that the IMPUs in the Guwahati city operate mostly in an independent environment having some elements of direct backward linkage with FS through the provision of medicine and health care and credit inputs.

There are also some distortions in the input market including labour for the IMPUs. Even in an independent environment of operation, the IMPUs are exploited by the traders in terms of price margins on the supply of raw material inputs. The state should extend the
policy of positive discrimination as applicable to the small scale sector in toto to the IS. This will in principle remove a lot of distortions in the factor as well as product market.

IMPUs and for that matter, IS as a whole is an entity of heterogeneity. There are some IMPUs having own land and some IMPUs without having own land. The IMPUs having fixed collateral have easy access to FS financial institutions for credit. In this context, an extension of the positive discrimination policy to IMPS is likely to exclude the wage earners and the resource-less from the purview of benefits. Although specific policies are required for the development of this sector but all such policies should be organically linked with the ultimate objective of this sector which is nothing but its “wholesome development”. Longevity and development of IS ultimately lies in such an approach.

End Notes

ii Hart presented this paper at the conference on “Urban Unemployment in Africa” in the Institute of Development Studies, University of Sussex in September 1971; subsequently the paper was published in a revised form in The Journal of Modern African Studies, Vol. II, No. 1 in 1973, under the title “Informal Income Opportunities and Urban Unemployment in Ghana”.
iii As some scholars started identifying Lewis’s subsistence sector with agricultural sector or rural sector, Lewis reasserted that he talks of only subsistence sector and capitalist sector but not any other type of dualism.
iv WEP (World Employment Programme) was launched by ILO in its 1969 session. Since then the ILO has conducted a large number of country and city studies in 1970s, 1980s and early 1990s. All these studies primarily aim at creating an employment centred growth process.
The following procedure is used to calculate the informal sector employment in Guwahati City.

(i) Total business enterprises are in Guwahati City = 51100.

(ii) Total No. of Lodges, Restaurants, Sweet Centres, Tea Stalls, Coffee & Snack Bars, Hostels, Bibah Bhawan, Fast Food Stalls, Beauty Parlours, etc are 2194

Total Establishments/Enterprises = 53294.

Each establishment/enterprise employ on an average 3 persons including self employed. It comes to total employment = 53294 x 3 = 159882 persons.

On the other hand calculated daily wage Labourers in Guwahati City is 11800 persons (The Assam Tribune, An English Daily Newspaper, 1st and 2nd May 2008)

So, Total informal sector workers in Guwahati City are 159882+11800= 171682 persons (1.72 lakh rounded off)
Official Records of GMC, Central Zone, Guwahati, April 2009.


Compiles Figures based on the data collected from the Directorate of Tourism, Government of Assam and Published data, Published in Asomiya Pratidin, An Assamese Daily Newspaper, published on 18th February 2009.


Self employed person: A person is regarded as ‘self employed’ in an occupation if he had been working as an employer or own-account worker in that occupation. An own-account worker could be both a single worker and/or joint worker of an enterprise (Rural Labour Enquiry).

Productive capital is the total of fixed capital and working capital.

Fixed capital and assets includes the present value of cattle population, cow sheds, store buildings, tools and machines. We have excluded the value of land and buildings from fixed capital and assets as only 16.5 percent of the sample units have their own land and buildings. We have taken only the present value of the fixed assets including tools and machines as reported by the entrepreneurs of the enterprises, since majority of them were not able to tell the purchase price of these assets.

Working capital (or inventory capital) = the present value of raw materials (i.e., cattle feeds, concentrates and fuels) + cash in hand and bank for meeting day to day operational expenditures of the units.

‘Imputed wage value of family labour’ in this informal milk producing sector is assumed of a minimum average wage per family worker per day. A family labour is defined by us as “person who work without monetary remuneration for a minimum period of two-third of a normal days’ work in the business of a member of the family”.

Imputed rent for owned land and buildings = the average rent prevailing in the market in this informal milk producing sector for land and buildings used for operating a dairy enterprise. The average imputed rent for owned land and buildings is assumed of Rs. 600 per month.

Size of the firms is measured in terms of average workforce employed by per sample IMPUs.

We have taken “gross value added” here. Gross value added = value of total output – value of total inputs.

IAMR National seminar on “Employment promotion in the urban IS” was held in December 14-15, 1995 in collaboration with the ILO. Seminar paper on technical session III subtitled “integrated development of urban informal sector” was prepared by V.K. Dhar of N.I.U.A., New Delhi.


Hans Singer, Chief of the ILO, Kenya Mission also concludes in this one.


Size of the IMPUs indicate here in terms of the monetary value of “Fixed Capital and Assets” of the enterprises/units.


Reichemoth (1978): He speaks of direct linkages (both forward and backward), which involve actual transfers of production through the provisions of supply of and demand for inputs and outputs. His indirect linkages (he calls them macro-level or structural linkages) refer to mechanisms of exclusion and to competition and complementarily in production and markets of factors and goods.

These IMPUs are provided all sorts of help by their respective “Co-operative Societies” for getting credit/borrowings from the formal financial institutions and in return of it, these IMPUs are prepared to sale a portion of their product to the Society. Again, the Societies sale it to the middlemen according to their prior contract.

Single Owner Unit

Psacharopoulos (1985) and Singh (1992)
When one passes out in the class 10\textsuperscript{th} board examination, conducted by the Board of Secondary Education, Assam (SEBA), or similar examination boards like – CBSE, etc. he/she becomes a matriculate and his educational level is secondary level or matric. Thus the level of education “below matric” in respect of the entrepreneurs means that yet to pass out in class 10\textsuperscript{th} board examination.

When one passes out in the class 12\textsuperscript{th} final examination conducted by the Assam Higher Secondary Education Council (AHSEC) or similar examination boards like – CBSE, etc. he/she is called an intermediate or his/her education level is called Higher Secondary level.


See George in S.V. Sethuraman’s edited Volume “The Urban Informal Section in Developing Countries – Employment, Poverty and Environment”, 1981.


Gross earnings are the difference between turnover and Total cost.