ferent needs among socio-economic groups have to be recognized. Also in this field, policy design and implementation require coordinated efforts of local planning boards (BAPPEDA), the relevant service departments and village level participatory organizations such as the LKMD.

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RURAL SMALL SCALE INDUSTRIES AND REGIONAL DEVELOPMENT
A Case Study From Bantul District, Special Province of Yogyakarta

by
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Agus Sutanto**

ABSTRACT

In last two decades, the small scale industrial sector, due to various reasons, has increasingly received attention from Indonesian policy makers. In the research area, rural small scale industrial activities play an important role, yet in a varying way. Production factors like labour and capital as well as the degree of localism are used to illustrate the differences in character.

Attention is also paid to the linkages of those small scale industrial units with other units and sectors. Based on the main characteristics and the function of those rural small scale industrial activities, a distinction is made between basic and non-basic activities.

A short description is given of the most important government programmes in the sphere of small scale industrial development. It is concluded that policy makers have given insufficient attention to the differences within the sector. As a result, most of the small scale industrial units are deprived of the programmes which are specifically designed for them.

INTRODUCTION

This article is the third one in a series of articles written by staffmembers of the Faculty of Geography at Gadjah Mada University, Yogyakarta. The newly established department for the Rural and Regional Planning at this faculty, is presently carrying out a long term research programme regarding rural and regional development planning efforts in Bantul district. The general aim of this research programme is to make an inventory and analysis of development plans and programmes in selected subdistricts in one of the DIY's districts against the background of these units development potentials and constraints, in order to assess the

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regional problem orientation of the various plans and programmes (Huisman and Stoffers, 1988).

In the first two phases of the research programme an analysis has been made of the internal differentiation of the research area (Huisman and Stoffers, 1988, 1989, 1990). Besides, indepth studies have been carried out into various regional development planning related fields of interest like community services, economic services, and non-agricultural employment.

In this article, attention will be focused upon rural industrialization. During the last three decades, most third world countries have experienced an enormous population growth. Since most of the population lives in rural areas, this has resulted in an increasing rural population pressure. Therefore, one of the principal challenges for governments in those countries is to absorb of the large and rapidly growing rural labour force in productive employment. The agricultural sector is not able any more to do so alone. Productivity per labourer frequently has reached or passed its optimum and a physical extension of agricultural land has become increasingly difficult. Besides, it may be questioned whether the, in general higher educated, newcomers on the labour market are inclined to seek employment in the agricultural sector.

The increasing population pressure and the increasing difficulty in finding adequate employment in the rural areas has resulted in a growing stream of rural-urban migrants. Most of those migrants did not have a job in the city yet, but only expected to be able to find one rather easily. Initially, it was indeed fairly easy to find a job in the urban areas. The influx of job seekers, however, grew faster than the creation of jobs, resulting in employment problems in the urban areas comparable to those in the rural areas. The urban economies were not capable anymore to absorb the constantly growing labour force, and possibilities were sought to decrease the rural-urban migration flows. One of the creation of additional non-agricultural employment in those areas through rural industrialization.

In early stages, rural industrialization was not much more than a creation of large scale capital intensive production units in the countryside, which did not really help to alleviate the employment problems in the rural areas. Only in the course of the nineteen seventies, governments became aware of the development potential of the small scale industrial sector in urban as well as in rural areas, in which the local population usually already was involved for long periods of time.

Problems hindering the formulation of clear policy in this respect were the conceptual vagueness and interdisciplinary character of rural small scale industrialization. What is rural, what is small, which are the relations with the agricultural sector? Many textbooks have been written about the problem of demarcating rural small scale industries (Staley and Morse, 1965; Haq, 1979; Chuta *et al.*, 1984). It is beyond the scope of this article to embark on this discussion. Here we will show that rural small scale industrialization is a heterogeneous field of interest and that, for policy formulation, insight is required regarding the diversity in main characteristicts of its production units, as well as their contribution to regional development.

To this end, the introduction will be followed by description of this research findings will be presented consisting of an analysis of the main characteristics of some of the most important rural small scale industries in the selected areas, as well

as their importance regarding regional development. In the next section an overview will be given of the most important government programmes in the sphere of rural small scale industrial development. Finally, some conclusions will drawn regarding the problem orientation of rural small scale industrial development programmes within this Central Javanese context and some recommendations will be given.

RESEARCH AREA AND RESEARCH METHODOLOGY

As a research area for the long term research, Kabupaten Bantul, one of the most densely is located south of the city of Yogyakarta, and, although of a fairly limited size (507 square kilometer), it is marked by a considerable internal differentation. Based on physical features, a distinction can be made between a very fertile lowland area in the central part, and two less fertile upland areas in the east and the west.

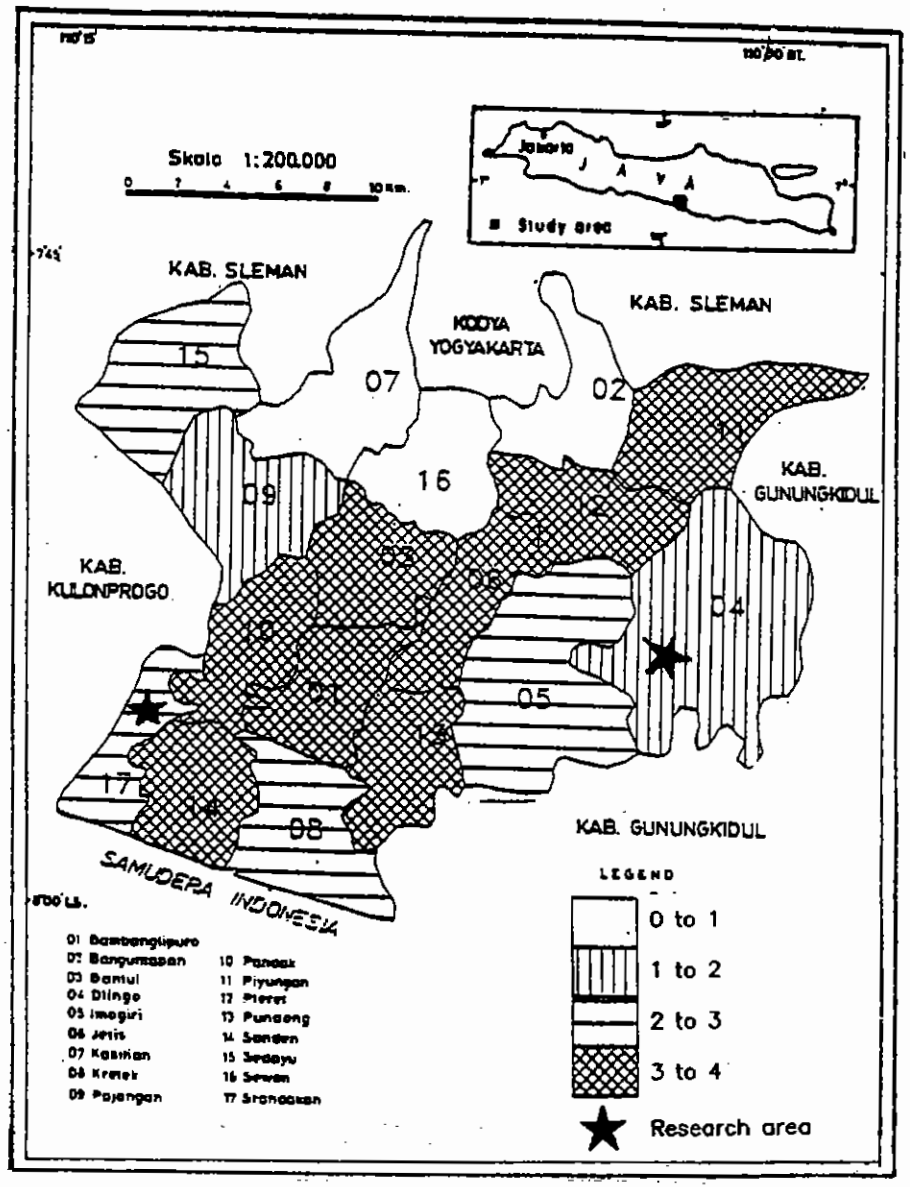
Using the percentage of the labour force employed in the agricultural sector as a criterion, the district can be divided in a peri-urban and a rural part. The peri-urban area is characterized by more than 65 percent of its labour force employed outside the agricultural sector and consists of three subdistricts immediate ly bordering the municipality of Yogyakarta.

The subdistricts in the rural part of the area have been grouped in three types, based on the amount of irrigated land as a percentage of total agricultural land (see map). A distinction has been made between subdistricts with less than 10 percent of their agricultural land irrigated, subdistricts with 10 to 35 percent of their agricultural land irrigated, and subdistricts with more 35 percent of their agricultural land under irrigation. For the district as a whole, agriculture is still the most important sector from an employment point of view (49.5 percent of house holds are involved in agricultural production in a primary sense) large differences, however, can be found. Within the rural part of the district, involvement in agricultural production varies from 37 percent of the households in Srandakan up to 87 percent of the households in Dlingo (Bantul Dalam Angka, 1988).

For the research, of which this article presents the results, those two contrasting subdistricts have been selected for the data collection. The two areas can be a general sense as follows.

Subdistrict Dlingo is located in the calciferous upland area in the eastern part of the district. This part of the district is topographically rather rough and its mainly lateritic soils are of a limited fertility and have a limited water containing capacity.

Almost all households in this area are involved in (dry land) agriculture, either in a primary or in a secondary sense. Although the average farm size is relatively large, according to Javanese standards (1 hectare), the productivity per hectare is so low that agricultural production often is not enough to earn a sufficient household income. All kinds of additional activities have to be performed to supplement household incomes. Due to those less favourable conditions, the population density is relatively low; 583 inhabitants per square km, as compared to 1347 inh/square km for the district as a whole.



Map 1. Typology of Kecamatan in Kabupaten Bantul

Subdistrict Srandakan is of an entirely different nature. It is located in the southwestern part of the district and consists largely of a rather flat low lying plane. A part from the infertile zone immediately bordering the Indian ocean, the area consists of marine deposits and volcaniclastic material with a high fertility and good water containing capacity. Soil characteristics therefore are favourable for agricultural production. However, especially along the Indian ocean and the Progo river, the farmers are confronted with drainage problems, resulting in severe floodings in the rainy season. Population density in this area is higher than for the district as a whole; 1509 as compared to 1347 Inh/square km. Due to a large amount of land cultivated is very limited, resulting in an astoundingly high agricultural population density of 6253 inh/square farmland km. Consequently, average farm size is very small (0.1 Ha) and 40 percent of the households is landless. Non-agricultural activities therefore are very important as mainstay activities in this area.

In table 1, an overview is given of the incidence of small scale industrial units in main categories in both subdistricts and the district as a whole. From this overview a certain degree of regional specialization can be seen. Small Scale Indutrial units processing food, and to a lesser extent textiles and non-metallic minerals, are relatively overrepresented in Srandakan. In Dlingo this specialization is even more apparent; three quaters of all industrial units are involved in wood processing.

TABLE 1. SMALL SCALE INDUSTRIAL UNIT ACCORDING TO MAIN CATEGORY

	Srandakan		Dlingo		Bantul	
	Abs	%	Abs	%	Abs	%
Food Processing	385	33.8	91	6.3	5541	25.6
Textiles	274	24.0	4	0.3	4728	21.6
Wood/Wood Products	255	22.4	1088	75.5	5799	26.9
Non-Metallic Minerals	206	18.0	-	-	3164	14.1
Other	21	1.8	258	17.9	2392	11.1
Total	1141	100	1441	100	21624	100

Source: Bantul Dalam Angka, 1986

In both subdistricts the two most common types of rural small industry (according to final product rather than main category) have been determined. In Srandakan, this turned out to be *Tahu* (i.e. soybean cake) production as a representative of the food processing industries and roof tile production representing the processing of non-metallic minerals. In Dlingo, *Tempe* (i.e. fermented soyben snack) production has been selected, which belongs to the category of food processing industry. From the 500 households, as present for those two subdistricts in the base-line data bank, 60 respondents have been chosen, following a purposive random sampling method. First all households operating in the types of industry as described above were selected. Subsequently, from each group 15 representatives were taken in an ad random way. This resulted in 15 food processing and 15 roof tile making units in Srandakan and 15 food processing and 15 furniture making units in Dlingo. The results of the analysis of the data as collected during the visits paid to those households, are outlined below.

RURAL SMALL SCALE INDUSTRIES IN THE RESEARCH AREA

In this paragraph, an overview will be presented of the main findings of the research. A distinction will be made between the main characteristics of the various types of small scale industries, as expressed through their products and combination of production factors respectively, and their contribution to regional development as reflected through their spin-off effects.

Production And Production Factors

In the description of the research area it has been mentioned that the importance of non-agricultural activities varies considerably between the two selected subdistricts. This observation is illustrated in figure 1, which depicts the relative importance of rural small scale industrial production for the households included in the research. In Dlingo, the small scale industrial activities are always additional to other (agricultural) activities, although sometimes they are considered to be the most important one. In Srandakan, to the contrary, many households are involved in small scale industrial production only.

Small scale industry is relative concept. Which units are considered to be small depends not only on the criterion used, but also on the industrial development as present in the country under study. The scale of an industrial production unit can be measured in different ways, for instance through the annual sales, capital investments, installed production capacity, or the number of people employed.

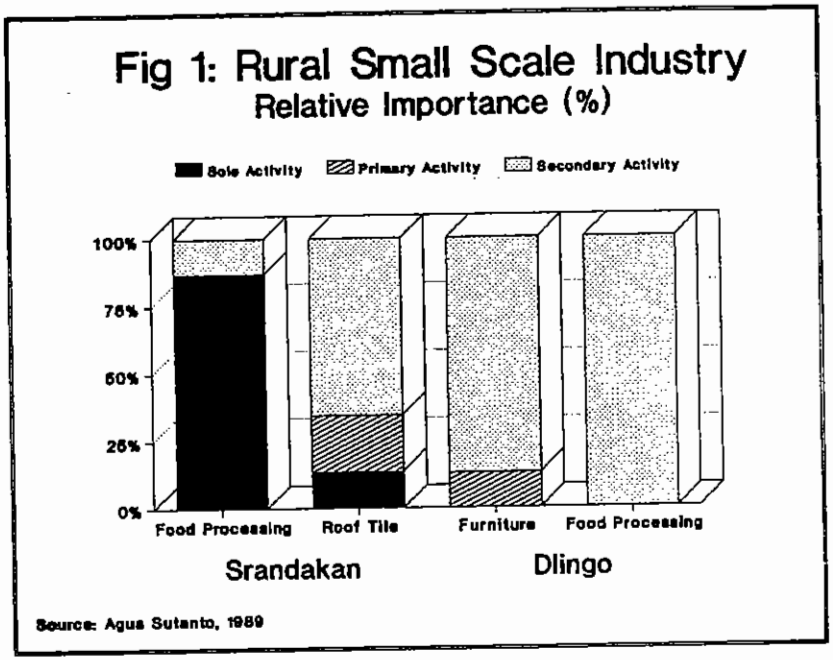
Based on the number of people employed per unit, the Indonesian industrial census 1974/1975, distinguishes between cottage/household units (less than 5 workers); small scale units (5-19 work ers); medium scale units (22-99 workers) and large scale units (100 and more workers). According to this classification, most of the industrial units in the research area classify as household/cottage industries (Table 2). Only part of the food processing units in Srandakan can be classified as small scale.

TABLE 2. NUMBER OF LABOURERS AND OTHER LABOUR RELATED CHARACTERISTICS

Characteristic	Srandakan Roof Tile Making	Srandakan Food Processing	Dlingo Furniture Making	Dlingo Food Processing
Less than 5 workers	87 %	47 %	93 %	93 %
Paid labour	10 %	65 %	49 %	5 %
Full time	45 %	81 %	41 %	41 %
Season dependent	-	3 %	32 %	42 %

Source : Agus Sutanto, 1989

Although most of the units are grouped within the same category of cottage/household industry, they show some remarkable differences. Not only do they vary in main characteristics of the production units, also regarding their roles in a larger economic perspective, important differences can be seen, as will be shown below. This indicates that a grouping of industries based on the number of employees only may be insufficient; aspects like management and internal organiza-



tion, the importance of capital, the profitability and growth potential also should receive attention when classifying rural industries.

The industrial units in the upland area can be separated from those in the lowland area, not only through the number of labourers, but also through other labour related features. The activities in Dlingo can, to a large extent, be described as (season dependent) part-time activities, carried out by unpaid family labour. As regards payment however, furniture making should be distinguished from food processing in this area, as more paid labourers are employed in the first activity.

The activities in the lowland area, to the contrary, are more generally carried out on a full-time basis and are not concentrated in any specific season. Paid labour is more common in this area, although the roof-tile industry differs considerably from food processing in this respect.

In general, rural small scale industries are of a labour intensive rather than a capital intensive nature; only limited capital is required for its establishment and production. Some capital however, is always required and a distinction can be made between a fixed and a variable part. Fixed capital covers working place, tools and machinery, and as such does not fluctuate with production. Variable capital includes raw material and other inputs, wages, energy, transport etc. and therefore fluctuates with the amount of production. Fixed capital is rather unimportant for industrial production in the area.

In general no specific working place is used for production purposes; usually part of the own house is designated for those tasks. Also the tools and machinery used are fairly simple. Often, especially in the food processing industry, no distinction can be made between the equipment used for household purposes and those used for industrial production. Despite the limited impor tance of fixed capital in an absolute sense, the food processing industry in Srandakan can be separated from the other industries (Table 3). Most food processing entrepreneurs in this area have invested in soybean grinding machines, waterpumps, steam engines for boiling purposes and a generator. This explains the higher relative importance of fixed capital for those industries.

TABLE 3. FIXED AND VARIABLE CAPITAL

Characteristic	Srandakan Roof Tile Making	Food Processing	Dlingo Furniture Making	Food Processing
Fixed capital (x Rp.1000)				
< = 50	100 %	-	60 %	100 %
51 - 100	-	47 %	40 %	-
101 - 1620	-	53 %	-	-
Variable capital (x Rp.1000 per month)				
< = 50	100 %	-	53 %	60 %
51 - 250	-	-	47 %	40 %
251 - 1000	-	47 %	-	-
> 1000	-	53 %	-	-

Source : Agus Sutanto, 1989

Tahu production in Srandakan also differs from the other industries regarding the amount of variable capital used. At least Rp. 250,000 per month is invested by food producers in this area, as compared to the other entrepreneurs, which in general do not invest more than Rp. 50,000 per month.

Regarding the origin of capital used for industrial purposes, an interesting feature has to be mentioned here. In the food processing industry in Srandakan capital is generated by the activity itself. This sharply contrasts with the situation in furniture making in Dlingo; where most of the money used for non-agricultural activities is derived from agricultural activities. The profits made with the non-agricultural activities apparently are too limited to finance its own production, which also explains the lack of investment in those activities in this area.

The daily output of rural small scale industries depends on its production cycle and/or the demand. The food processing industry in Srandakan for instance produces and sells *tahu* daily on distant markets. The food processing industry in Dlingo, on the other hand, depends completely on local demand. Its production is adapted to the presence of a market in town, which means a production of *tempe* twice a week. Contrasting to those demand determined activities, the output of the other two activities is production determined. The roof of tile industry produces raw tiles daily, but they are baked only twice a month, to make a more efficient use of fuel wood. Furniture is bigger and more varied in size, therefore it is difficult to assess its marketing frequency.

TABLE 4. PRODUCTION CHARACTERISTICS

Characteristic	Srandakan Roof Tile Making	Food Processing	Dlingo Furniture Making	Food Processing
demand determined	-	100 %	-	100 %
process determined	100 %		100 %	-
Average production per month (x Rp.1000)				
< = 100	67 %	-	60 %	93 %
101 - 300	33 %	-	40 %	7 %
300 - 1000	-	53 %	-	-
>1000	-	47 %	-	-

Source : Agus Sutanto, 1989

In monetary terms their is a large variation in output of the various activities (Table 4). The highest output is obtained by the food processing industry in Srandakan. All units produce for more than Rp. 300,000 per month and almost half of the units even more than one million per month. All other industries produce for less than Rp. 300,000 per month and the majority even less than Rp. 200,000. The lowest output is derived from food processing industry in Dlingo, where hardly entrepreneur produces for more than Rp. 100,000 per momth.

The income derived from the industrial activities is calculated through a substraction of the variable capital from the value of production. Although this is very rough estimate, it appears that the rural small scale industries in Srandakan generate much higher incomes than those in Dlingo (Table 5). The most important

activity from an income point of view definitely is food processing in Srandakan. Up to Rp. 1,000,000 per month is earned here, which explains why many tahu producers in this area do not perform any other economic activities. In Dlingo, a much lower income is generated in the household industry, which is typical for additional economic activities with a low production capacity and based on a local demand with a low purchasing power.

TABLE 5. AVERAGE MONTHLY INCOME

Characteristic (Rp)	Srandakan Roof Tile Making	Food Processing	Dlingo Furniture Making	Food Processing
< = 50,000	47 %	7 %	67 %	93 %
50,000 - 150,000	53 %	20 %	33 %	7 %
> 150,000	-	73 %	-	-

Source: Agus Sutanto, 1989.

A general characteristic of rural small scale industries is localism. This means that local inputs are processed and that the produce is sold on local markets. This is also true for most of the production units in our research area. Most units process (mainly) locally obtained inputs. The clay used for the roof tile industry, wood for the furniture production and the soybean for the *tempe* production in Dlingo all originate from local source, sometimes supplemented with non-local material. The food processing industry in Srandakan, again, takes a different position. This group of producers obtains its inputs mainly from non-local sources. The processing of soybean has increased so dramatically in this area that the local production is insufficient to meet the demand. A cooperative (PRIMPKOPTI: *primer koperasi tahu tempe*) has been established, especially to take care of the soybean supply.

Regarding marketing, it is noticeable that the production in Srandakan is less local in nature than the rural small scale industry in Dlingo, although some differences may be observed. The tahu made in Srandakan is almost completely sold in the city of Yogyakarta and therefore is transforted over the longest distance. Most of the roof tiles, on the other hand, are sold in neighboring subdistricts, due to relatively high transport costs.

TABLE 6. DEGREE OF LOCALISM OF INDUSTRIAL PRODUCTION

	Local Marketing	Non-Local Marketing
Local Raw Materials	Food Processing in Dlingo (100%) Furniture making in Dlingo (80%)	Roof tile production in Srandakan (87%)
Non-Local Raw Materials	Food processing in Samdakan (20%)	Food processing in Srandakan (67%)

Source: Agus Sutanto, 1989.

Based on the major source for raw material and the major market area the degree of localism can be determined (Table 6). It appears that the rural small scale industry in Dlingo is very local in character, not only from an input, but also from an output point of view. This sets off sharply from the rural small scale industry in Srandakan, which is more non-local in nature.

Small Scale Industry and Regional Development

In the previous paragraph, attention has only been paid to the differences in main characteristics of the production units. From a regional development point of view this is not enough. Attention should also be paid to the spin-off effects of those industrial activities. Those spin-off effects can be direct and indirect. Direct spin-off effects are the provision of jobs and incomes to the un(der)employed part of the labour force, through employment in the units themselves. Indirect spin-off effects are stimuli given to other production units through linkages.

A difference regarding direct spin-off effects between the food processing industry in Srandakan and the other activities, has already been indicated. The *tahu* production in this area, apart from giving the entrepreneur a relatively high income, also generates employment and a reasonable income for people not belonging to the household itself. In other words, this activity offers employment possibilities for unemployed people.

Furniture making in Dlingo also uses paid labour, but more on a part-time and seasonal basis. As such it is an important source of alternative employment in the agricultural slack season. The other activities mainly employ unpaid family labour and do not offer any alternative employment opportunities to people who are not involved in agricultural production anymore. Therefore, they do not have any significant direct spin-off effects.

Linkages indicate relations between a production unit and other units in the same or in other sectors. If a unit is related to other units in the same sector those linkages are called horizontal and if the relations exist with other sectors they are called vertical. Besides, a distinction can be made between forward, backward and final demand/income linkages, which will be discussed more extensively below. Through those linkages, production in one unit can stimulate (or be stimulated by) production in other units or sectors. Due to its location in the rural areas, linkages of the rural small scale industries with the agricultural sector may be considered to be the most important, and therefore will be concentrated upon.

Forward linkages are those linkages in which output from rural small scale industries are used as an input for agricultural production. Due to the very nature of the industries investigated, it is evident that those forward linkages are absent. A special feature of the tahu production in Srandakan, however, has to be mentioned here, although, strictly speaking, it is not a forward linkage. Leftovers from the tahu production are used as fodder for pigs which are raised as an additional activity. Those pigs are sold at distant markets like Jakarta, and furnish the tahu producers with a considerable additional income. Through an increasing tahu production a stimulus might be given to this kind of livestock production.

Backward linkages with the agricultural sector indicate a situation in which output from the agricultural sector is used as an input for rural small scale in-

dustrial production. This is obviously so for the food processing industries. Those industries process soybean, which clearly is an agricultural product. The furniture making industries can also be considered to have backward linkages, as the wood they use also is an agricultural product. Those three activities may stimulate agricultural production and an increasing production of the raw material may stimulate the rural small scale industry. Therefore, be backward linkages for those activities are apparent. It may however be questioned whether, especially for the food processing industry in Srandakan, the local stimulus is significant, since a large amount of the processed soybean is derived from non-local sources.

Roof tile making is a different story. The raw material used, clay, is not an agricultural product, but rather an agricultural production factor. The roof tile industry therefore, to a certain extent, may be considered to be competitive with agricultural production. Therefore, an increasing roof tile production may diminish agricultural production and an increase of agricultural activity may hinder a further development of the roof tile industry. Here the local circumtances are decisive, since the raw material is completely derived from local sources. An alternative could be the purchase of clay on non-local markets, but this will increase prizes and, as a consequence, will considerably influence the marketing position in a negative way.

Apart from the direct linkages as discussed above, indirect or final demand linkages with the agricultural sector are equally important. Especially for those rural small scale industries which sell their produce locally, like the industries in Dlingo, the local purchasing power is of utmost importance. An increasing agricultural production, resulting in an increasing purchasing power therefore can be a stimulus to non-agricultural production. In Srandakan those indirect relations are less important as its produce is mainly sold on urban markets, less influenced by developments in the agricultural sector.

Summarizing it can be stated that the two rural small scale industries in Srandakan have a basic character, though to a different extent. Especially the food processing industry is important in this respect. Both activities import income from other areas through the sale of (improved) produce at markets outside the own district. If developed in the right way those activities can function as a catalyst for rural development in the area. The rural small scale industries in Dlingo on the other hand are non-basic. Not only do they not increase employment opportunities, nor do they provide the area with an additional income, they merely redistribute the money as present in the district. The advantage of those activities from a macro economic point of view is that they prevent unemployed people from trying their luck in the city as some additional employment is still available in the area itself. An additional advantage is that retain money in the rural area instead of letting it siphon away to the urban economy.

RURAL INDUSTRY AND GOVERNMENT PROGRAMMES

Small scale industries, and especially those located in the rural areas, have not received much attention from the Indonesian government in the past. Ever since the first five year development plan (REPELITA 1969-1974), government efforts have mainly been directed towards the agricultural sector. As far as attention was given to the industrial sector, this mainly concerned urban based medium and large scale units, as those were perceived to contribute to economic development in the most significant way.

In the 1974, BIPIK (Counsel for Small Scale Industries) has been established, an agency specially charged with the provision of managerial and technical guidance to small scale industrial units. One of the achievements of this agency has been the creation of SIK's (Sentra Industri Kecil), i.e. small scale industrial centers, which, at least theoritically, have become the pivot of small scale industrial development.

SIK's actually only exist of a cluster of similar industrial units within a certain administrative area; usually at village, but sometimes at subdistrict, level. In 1988, 52 SIK's were present in Bantul, encompassing a total of 3052 units (14.2 percent of the total number of small scale industries units in the area). The clusters vary in size from 4 units in a Batik center in Sanden up to 516 units in bamboo weaving and handicraft cluster in Dlingo. For the identification of small scale units which can be clustered into a center, priority is given to those rural small scale industries wich contribute to an increase in regional income, through an exploitation of the available local resources. Besides, they should significantly contribute to the creation of non-agricultural employment and its produce should have a local demand or be of such a quality that it can be exported.

The SIK's have been established to facilitate government interventions. Concentration of scarce manpower and finances on clusters instead of individual units is preferred from an efficiency point of view. In principle this is a sound idea, but its effectivity may be questioned. The major weakness of the programme is in the selection criteria. All small scale industrial activities which are either too much dispersed over the rural areas, or which are additional to other (agricultural) activities, are excluded from the programme. As has been shown in the previous paragraph, this means an exclusion of most the industrial small scale units in rural Indonesia, since most of those activities are of an additional nature. This is also shown by the limited percentage of units in the research area actually clustered (14 percent).

Another initiative taken by BIPIK is the so-called "Bapak-angkat" programme, which consists of a lingking of small scale units to larger scale units through subcontracting. In practice however the big firms usually consider this to be an easy way to increase their own production, and rarely provide the smaller production units with assistance regarding product design and/or technical assistance (Sethurahman, 1985).

In the mid 1970's, two credit programmes have been introduced especially designed for the small scale industrial sector. Those credit-programmes are part of the KUPEDES (general rural credit) scheme and are called KIK (small scale investment credit) and KMKP (permanent working capital credit) respectively. Through those programmes, credit up to three million rupiah can be obtained, if the required collateral can be provided. This collateral can either be a land ownership certificate, or an entrepreneurship legalization letter. Because of the kind of collateral required, those credit schemes exclude landless people and those who perform industrial activities on an additional and informal basis. It is therefore hardly surprising that, in 1988, only some 16 percent of the units which should be reached through these programmes are actually using any credit (Agus Sutanto, 1989).

CONCLUSION

In the last two decades, the small scale scale industrial sector has increasingly received attention from Indonesian policy makers. However, compared to the importance from an employment and income generating point of view of this sector, the attention is still fairly limited. The main reasons for this increased interest are the growing labour force in the rural areas, the fact that the agricultural sector is not longer able to absorb those newcomers, and the need to try to keep those people in the rural areas rather than let them migrate to the urban areas.

In the research area, rural small scale industrial activities play an important role, yet in a varying way. Due to (very) high agricultural population densities, inhabitants of the research area are obliged to perform non-agricultural activities in order to earn a sufficient family income. In the upland area, those small scale activities are mainly of secondary importance and of a non-basic character. Local inputs are processed during the agricultural slack season and its produce is sold on local markets. In the lowland area, to the contrary, those non-agricultural activities are more generally of primary importance and of a basic character. This is especially true for the food processing industry in this area. Imported (and local) inputs are processed on a commercial basis and produce is sold on distant markets. This industry offers employment possibilities and in creases regional income.

Insufficient attention has been given to those internal differences by policy makers. Government programmes designed to stimulate the small scale industrial sector, are only directed towards activities of a basic character. The majority of the rural small scale industrial units is therefore deprived from government support. Due to their characteristics, the majority of the units can not be clustered into small scale industrial centres, which dispossesses them from technical and financial government support. Frequently, the producers also do not have access to formal credit facilities, which are specifically designed for the small scale industrial sector. In order to "create an atmosphere which enables the small scale industrial sector to grow and develop according to its own capabilities" (Kantor Departemen/Perwakilan Dinas Perindustrian Kabupaten Bantul, 1988), more attention should be paid to the differences within the small scale industrial sector and its different functions within the regional economy, rather than to its monetary contribution to regional income.

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