Towards Appropriate Planning Practices for the Industrialisation Process

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Introduction[1]

Honourable members of the IRDP Governing Council, Dear Acting Rector, Dear Colleagues, Dear Students, Ladies and Gentlemen. I feel honoured by this opportunity to introduce this conference at IRDP Dodoma with a keynote from an outsider's perspective. Obviously I am an outsider, but being here again somehow feels like home-coming. Not only because I see many familiar faces in this hall, but also because it feels like a continuation of the same debate we were engaged in on the occasion of the 9th IRDP convocation in December 2016. The theme of the convocation in that year was a very topical one, namely "Towards Industry-led Economy in Tanzania: the Role of Development Planners". I remember vividly that our discussions on the country's industrialisation strategy reverberated well into the afternoon and evening of that day. Actually, I visited Dodoma for the first time way back in 1978 and I paid my first visit to IRDP in 1981, shortly after the Institute had been established. So I can appreciate how the country has changed, how Dodoma has changed, and how Chuo Cha Mipango has developed over the years.

Rural development has been the focus of IRDP's mandate ever since its inception nearly 40 years ago. But the theme of today's conference is more specific: "Making Rural Areas Inclusive" is well chosen; it makes allusions to SDG 19 ("Make cities inclusive, safe and resilient") and similar statements in the New Urban Agenda.

[1] *This paper should be cited as follows: Schmidt-Kallert, E., (2018): Towards Appropriate Planning Practices for The Industrialisation Process, in Kinyashi, G.F., Mwang'onda,* E., *Mdendemi, T.R.K., Mandara, C.G., and Hauli, E., (eds.), Conference Proceedings for an International Conference on Planning and Development under the theme Towards Industrialisation in the Global South: Making Rural Regions Inclusive, held at the Institute of Rural Development Planning-Dodoma June 28-30, 2018.*

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Urban problems and opportunities for urban development have been in the limelight of the global debate in recent years. But rural areas need not be relegated to the function of a backyard of the big cities. The theme of our conference is a timely reminder that there can and there must be inclusive and sustainable development in rural regions as well.

The first key word of our conference theme – "industrialisation" has not always been in the focus of IRDP. But I think things have changed, since the Fifth' Phase Government launched its industrialisation strategy. In April 2016 the *Second Five Year Development Plan*, which contains the details of the strategy, was approved by Parliament. In November 2016, when I served as a Visiting Lecturer here at IRDP, my colleagues were already discussing the new challenges of this industrialisation strategy for the development planner's role. I see this keynote paper as a contribution to this debate.

My talk will be organised around four key questions:

1. What are the spatial implications of an industrialisation strategy?

2. What is the role of agricultural transformation in the "industry-led economy"?

3. How is industrialisation linked with urbanisation?

4. What is the development planner's role in the process?

1. What are the spatial implications of an industrialisation strategy?

Regional scientists have often made the comment: Economists are spatially blind. This is a sweeping statement, which is not always true. The New Economic Geography tells us a different story. But I would argue that Tanzania's *Second Five Year Development Plan* is spatially blind indeed. The strategy does not come with a convincing concept for the future spatial distribution of manufacturing in the country. The country is under-industrialised, and that is why the Fifth Government has embarked on a bold drive towards industrialization. I would contend, this is also the right time to translate the policy into a convincing spatial industrialisation strategy.

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Spatial categories are only mentioned in the context of the three development corridors, the Central Corridor, the North-West Corridor and the Mtwara Corridor, along which all flagship projects are to be lined up. The justification for the choice of the corridors is not entirely clear. I presume it must be production efficiency and economies of scale.

Development corridors may be a useful tool. But does the identification of the corridors mean by implication that there will be no industrial development in areas away from the corridors? I ask myself, what can a development planner do in a district, say 400 kilometres away from the nearest development corridor, for example in Rukwa Region? How can his district play a meaningful role in the transformation to an industry-led economy?

With regard to the types of industries to be attracted, the plan is rather explicit: It mentions employment creating industries, industries for mass consumption and export oriented industries. But where are the different types of industries to be located?

In the past, development planners came up with different models for the spatial organisation of industrial development, namely the growth pole, the relief pole, the growth corridor and the cluster concepts. Tanzania has her own experience with the growth pole concept. The *Second Five Year Plan* (1969-1974) comprised – among other things - of an industrialisation strategy for the country. The socialist government of those days wanted to create an industrial base to be able to produce goods for the people's basic needs. The interesting thing is: All industrial development was to be dispersed to nine alternative growth poles outside Dar es Salaam and evenly spread over the country. But growth pole strategies failed eventually, not only in Tanzania, but in many countries across the globe. Relief poles were a mixed success. Cluster strategies may have been successful in some settings, but not all envisaged industrial clusters have taken off.

In my opinion, all these strategies were too narrow by focussing on economic growth alone. They did talk of backward and forward linkages among industries, but they did not really pay attention to the people's quality of life and other non-economic factors of development. Making regions inclusive is more than just initiating economic growth! A key issue is spatial equity. How accessible is education and health care to all citizens? How good are environmental conditions in all the regions? What quality of life do the people

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enjoy in different regions? This is more than access to the labour market and to transport infrastructure for enterprises. I strongly believe: If the goal is inclusive and sustainable regions, then considerations of spatial equity matter a lot. Maybe this conviction of mine has to do with my German background. Germany enjoys relatively even standards of living throughout most of its territory. Levelling the existing gradients between the federal states and between urban and rural areas has been a key issue in national development and regional planning since the 2nd World War. The goal of equivalent standards of living has even been codified in the *German Basic Law,* our constitution.

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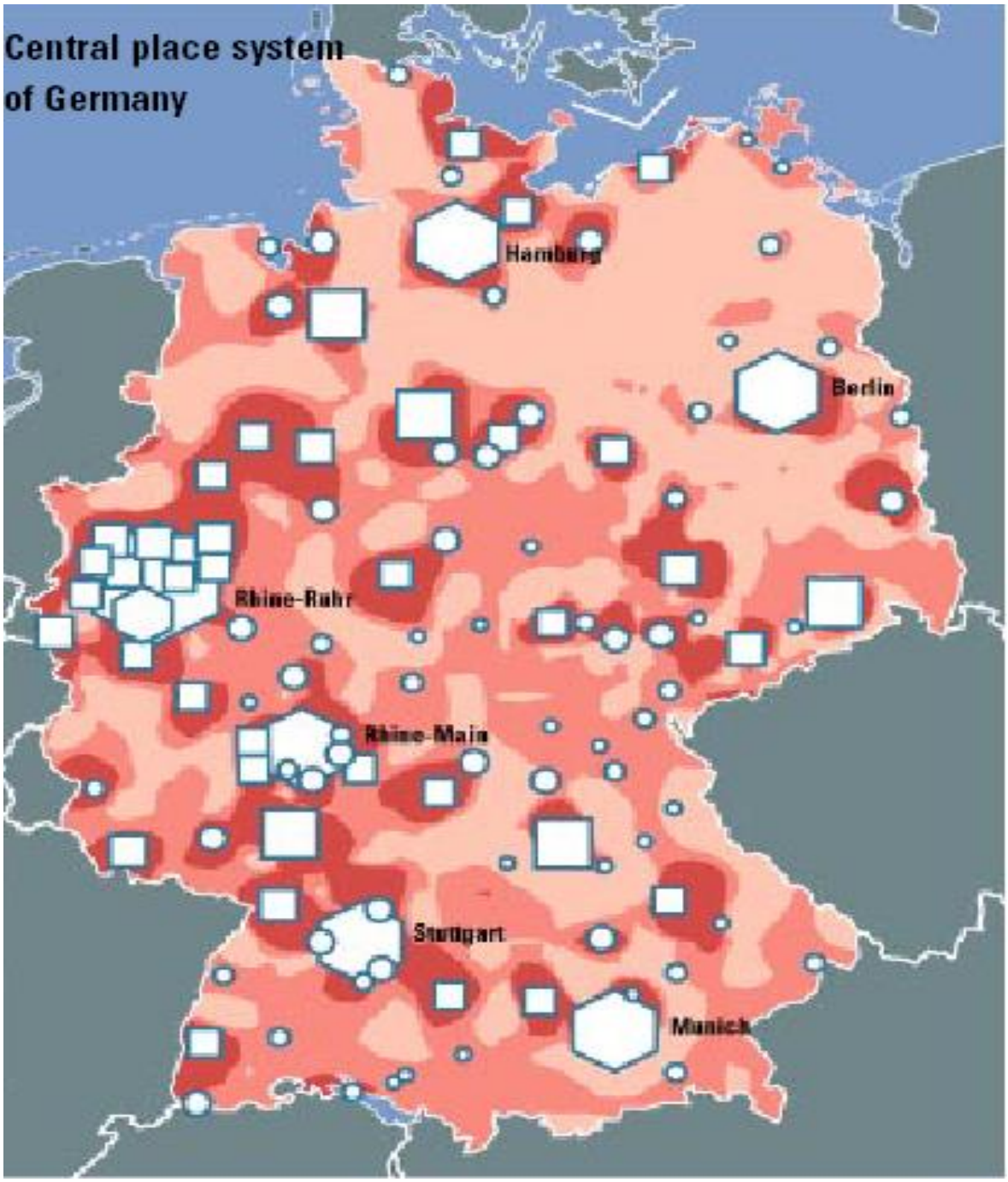

Figure 1: Central places of higher order as hexagons, squares and dots, and population densities in shadings of red.

Source: *BBSR, Bonn*

There is almost ubiquitous accessibility of infrastructure services in reasonable time. Consequently we have not experienced the same level of rural – urban migration as some other European countries.

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Tanzania has a *National Land Use Planning Framework*, but unfortunately this is not yet synchronised with the *Second Five Year Development Plan*. Moreover, no zonal and regional plans have been derived from the National Land Use Planning Strategy and the *Second Five Year Development Plan.*

Let me conclude my answer to the first question by saying: Any country that embarks on an industrialisation strategy needs a spatial development framework at the national level.

2. What is the role of agricultural transformation in the "Industry-led Economy"?

If Tanzania's industrialisation strategy takes shape as anticipated in the Five Year Development Plan, it is bound to have massive repercussions on the agricultural sector. The most obvious one will be a shift of labour force from agriculture to industry.

Currently agriculture contributes nearly 30% of Tanzania's GDP, and employs nearly 70% of the country's labour force. But in most parts of the country, the agricultural sector suffers from numerous problems; a large percentage of farmers are engaged in subsistence farming, and employ low-productivity farming techniques.

The *Second Five Year Development Plan* mentions that agriculture in the country needs lengthening and deepening of value chains, commercialisation and skills development. All this is necessary in order to increase productivity. Recently the President has launched the *Second Phase of the Agricultural Sector Development Programme* for the period 2018-2023. The emphasis is on improvement of small scale farming, livestock and fishing. In fact, this document provides for a strong link between productivity in agriculture and industries. While the focus on improved smallholder farming is commendable, some open questions remain: What will be the social effects of the increase in productivity? How is the drive towards industrialisation synchronised with agricultural transformation? How many farmers will have to give up farming? Where are they likely to find employment? How is the social structure of the villages likely to change? What type of farm households will survive?

Personally I would anticipate that for a long time to come you will have a mix of different farming systems in the same villages: some market oriented commercial farmers producing export products, side by side with semi-commercial mixed cropping family farms, some

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very poor households engaged in subsistence farming, and a sizable number of households supplementing their income from farming with remittances from urban-based family members.

But I did not see any scenarios of this kind in Tanzania's *Agricultural Sector Development Programme*. The 70% of Tanzanians engaged in agriculture in Tanzania have a right to know what future lies ahead of them!

Admittedly, to my knowledge not a single country in the world has successfully synchronised industrial development with agricultural transformation. The Industrial Revolution in Europe had enormous effects on the agriculture of each of the respective countries, but there was no planning ahead, there was no masterplan. The Industrial Revolution just happened, and farmers migrated to the cities and became labourers. The social hardships had to be borne by the former peasants alone.

After World War II European countries experienced more waves of agricultural transformation. Initially many smallholder farmers in Germany took up employment in the industrial sector as a second source of livelihood. There was a succession of different government policies, mainly aimed at softening the hardships of agricultural transformation. For example, in the 1970s the German Government set up vocational training centres in rural areas to re-train former farmers in skills which were in demand in the industrial sector. After the accession of East European Countries to the European Union shortly after the turn of the last century, a variety of social programmes in rural areas were funded by the European Union. But again, there was no comprehensive vision on how to deal with Eastern European farmers under the conditions of the European Union's Common Agricultural Policy.

3. How is industrialization linked with urbanisation?

During the Industrial Revolution in Europe industrial development was the engine which induced rural to urban migration and urbanisation. Sub-Saharan African urbanisation over the last few decades has been characterised as urbanisation under poverty, a new type of urbanisation, definitely not industry-led. If Tanzania now makes a fresh and conscious

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effort towards industrialisation, the question arises: What are the implications for urbanisation and the rural-urban divide?

Will the new manufacturing industries in selected urban centres and along the corridors constitute an additional pull-factor for rural migrants? Or will the industrial workers be mainly recruited from people already living in the cities and towns, from those who are engaged in precarious informal sector activities? Moreover, is industrialization linked to urbanisation or are these two completely different processes in the Tanzanian context? Will it be possible to establish at least part of the manufacturing enterprises in rural settlements, especially in the food processing sector?

Experiences with rural industrialization are varied across the world. As part of the "Great Leap Forward" China introduced in the 1950s a bold programme of rural industrialization, with manufacturing operated by all the People's Communes. But after privatization in the 1990s most of these enterprises did not survive, one can speak of an outright de-industrialisation of the rural areas. The result was industrial development along the coast, a massive movement of 280 million temporary migrant workers to the cities and 50 million children left by their parents in the care of their grandparents.

Germany has a mixed, but on the whole more positive record in this respect. As part of the effort to create equivalent living conditions, after World War II packages of incentives were given to investors, who were prepared to set up factories in the rural areas. Some of them did not survive, especially in the textile and garment industry, when countries with cheaper labour cost appeared on the scene. But many others, mainly mediums sized family-owned factories found their niches, even with production for the world market, and have thrived. What is more: they have contributed to the economic resilience of their respective region.

I remember our previous discussion on this issue in December 2016. Some of you argued: In Tanzania few investors will be prepared to locate an enterprise in a small town, and definitely not in a village. This is a key question, when it comes to translating the industrialisation strategy into a spatial concept. As I have said, experience is varied. I will therefore relate three case studies from different countries, which may help us to understand the different aspects of the problem.

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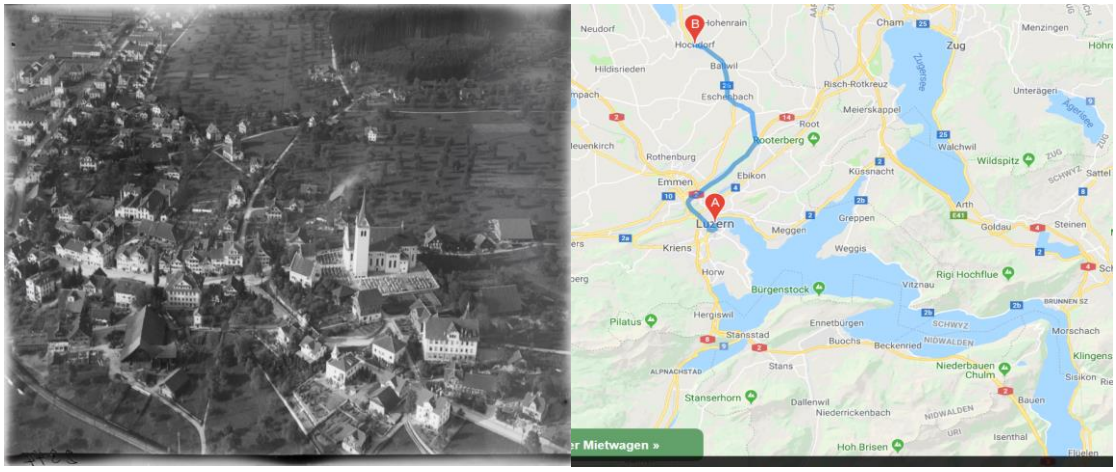

Case 1: The "Economic Miracle" of Hochdorf Village in Switzerland[2]

(Air photo from 1923, source: Local Council of Hochdorf, and location map)

- Located in central Switzerland, 30km from Lucerne;
- Railway connection built in 1883; English capital, nearly bankrupt.
- 1889 new railway director, active promotion of industrial development in Hochdorf:
- Brick factory, brewery, dairy factory, soap factory, chocolate factory,
- Embroidery plant, two local banks (provided loans to the entrepreneurs)
- Population increase from 1000 to 3000 within one decade, 800 industrial workers, in addition 300 female migrant workers from Northern Italy for the chocolate factory.
- 1909 crisis: the chocolate factory went bankrupt; decline of some other factories.
- Consolidation of the industrial base after WW1, after WW2 specialisation of some industries, in addition new enterprises, e.g. a medical engineering company, which produces operation theatre equipment for the world market.
- Today a thriving settlement with, few farmers, a sound industrial base and many commuters to Lucerne; current population: nearly 10,000 inhabitants.

Success factors: Transport infrastructure, active business promotion and networking at the time of industrial take-off (entirely by private initiative), good schools, availability of local

[2] *I wish to acknowledge the support I received from Mr. Werner Halder (Hochdorf) in compiling the industrialisation history of Hochdorf.*

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capital. Many local farmers have been absorbed by the industry; migrants from other parts of Switzerland and Italy have been integrated into the village society.

Case 2: The Streif Factory in the Eifel Mountains in Germany[3]

***Source**: Streif Ltd, Weinsheim*

[3] *I gratefully acknowledge the information provided by Mr. Jörg-Achim Vette, the CEO of Streif Ltd.*

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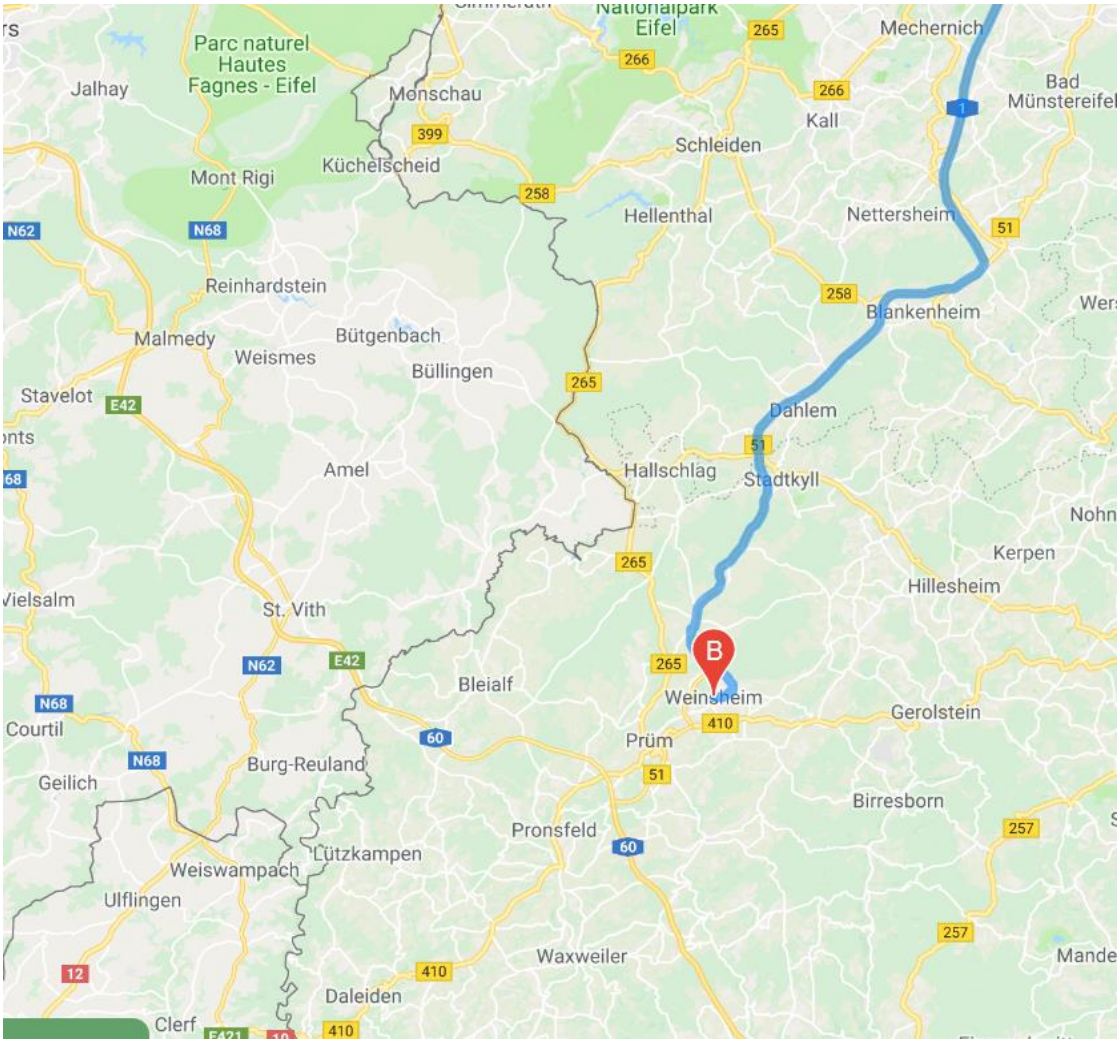

Location of Weinsheim in the Eifel Mountains, close to the German - Belgian border

- The company was founded as a medium-sized carpentry workshop. Turning point 1964, when the Federal Ministry of Housing invited a number of carpentry companies to present prototype pre-fabricated housing units.
- Streif was selected as one of the providers of pre-fab houses. Incentive for the buyers of pre-fab houses: They were (initially) exempted from building permits.
- The plant was built in Weinsheim, a village in the Eifel Mountains. Initial incentives: railway connection, fully serviced site; expectation to cover Belgian and French market as well.
- Ups and downs: 1980 end of building boom in West Germany led to a slump in sales, after 1989 (re-unification) more demand in East Germany.
- Current work force: 250 in Weinsheim, 200 at another location.

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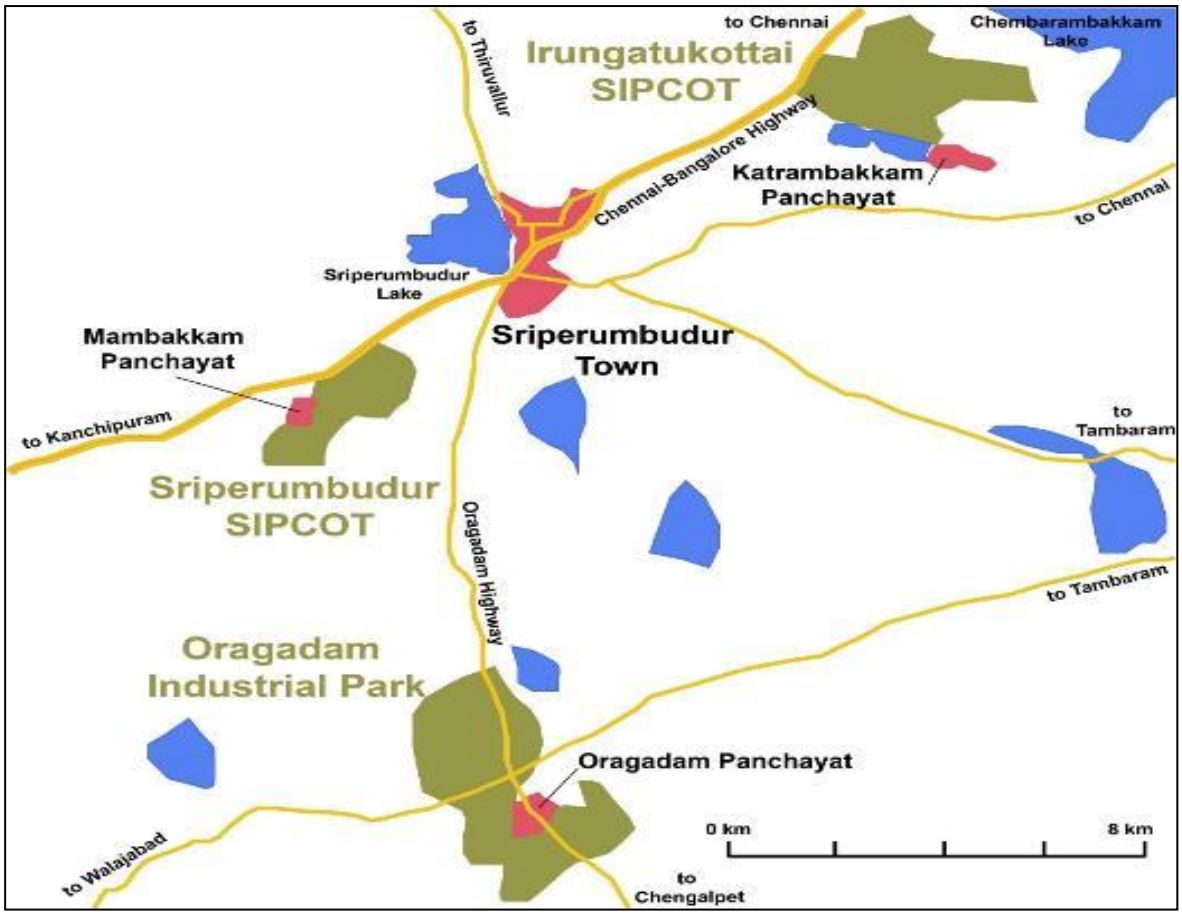
Current challenges: Railway line was closed; raw timber (pine) is now shipped by road. Location is one hour's drive from the next motorway (the pre-fab components need to be shipped by articulated lorries); specialised engineers need to be recruited from outside the region; the rural location is not attractive for specialised personnel.

Success factors: Incentives by central government during start-up phase; networking with other medium-sized enterprises in the region today.



Case 3: Industrial transformation in Sriperumbudur District in Tamil Nadu, India[4]

Location of Industrial Estates in Sriperumbudur District (Photo: courtesy Christoph Woiwode)

[4] *Source of information: Research by the Indo-German Centre for Sustainability; Indian Institute of Technology Madras, Chennai*

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Complete transformation of a rural district within one decade; formerly irrigation agriculture, production of rice, millet and vegetables, ancient tank system of irrigation;

- Key coordinating agency for coordinating investor decisions, land acquisition and infrastructure provision: SIPCOT (State Industries Promotion Corporation of Tamil Nadu);
- No development planning, neither by SIPCOT nor by the District Council; Town and Country Planning in subservient position.
- Three industrial estates established; anchor investors Hyundai and Samsung;
- Population has doubled, but industry employs nearly exclusively migrant labourers from North India. This applies to graduates of engineering colleges as well.
- Impact on agriculture: Loss of fertile land for industrial estates and housing for migrant workers; irrigation system largely defunct, many fields are left fallow.

Conclusion: Non-inclusive type of industrial transformation

None of my three cases makes for a best practice, which can be easily replicated. But certain lessons can be derived from them:

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Starting an industrial enterprise in a rural area may be more difficult than in an urban settlement. So during the start-up phase incentives by Central Government, by Local Government or a private initiative are highly welcome. Development planning, may pave the way for successful industrial development. Once an enterprise is well established, development needs to ensure the continuous upgrading of infrastructure and social equity.

Let me add another point: Urbanisation these days is much less uni-directional than during the Industrial Revolution in Europe. Migrants do not sever their links to their hometowns or home villages, when they migrate. They maintain numerous economic and social linkages with their home area. And the most successful ones do invest in their home village. Unfortunately there is little investment in productive enterprises. Mostly they invest in houses; they build large mansions, in which nobody lives. Economists would say, investments in the wrong locations, which do not serve any economic purpose. Their investment is prompted by cultural or traditional values. Would it not be a promising assignment for a district development planner to convince some of those potential investors to turn to putting their capital into a rice mill, a fruit juice factory or a canning plant in their home village?

4. What is the development planner's role in the process?

Finally, let me summarise some of the tasks of development planning in the industrialisation process. Development planning, as I understand it (and I could as well say, as we at IRDP understand it) is always multi-sectoral and is a blend of economic, physical, social and environmental planning.

Furthermore, the scholarly discussion on discursive planning in the last 20 years has shown that the development planner can assume multiple roles, he is not necessarily the plan maker and as such the representative of a statutory body. He can act as an advocate planner, e.g. as the advocate of disadvantaged groups in society, he can be a mediator in conflictive or contested planning cases; he can be the coordinator of stakeholder dialogue at the local or regional level.

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Tasks at the national level:

- Elaborate scenarios for the future economic development of the country, identifying the respective roles of manufacturing, agriculture and tourism while giving due consideration to ecological sustainability.
- Elaborate a normative spatial development concept at the national level. This document needs to designate the future settlement pattern with central places and development axes, priority zones for industry, agriculture, recreation and nature conservation as well as key infrastructure. Such a document ought to be a concerted effort of different Ministries in consultation with non-government stakeholders. (In Tanzania a joint effort of Ministry of Finance and Planning, Ministry of Trade and Industries, Ministry of Regional Administration and Local Government, Ministry of Agriculture, Food Security, and Cooperatives). Issues of economic feasibility and social equity need to be reconciled in this document.

Tasks at the local/ District level:

- Identify the best mix of industries based on the potentials of the area;
- Elaborate future scenarios for the locality or district;
- Initiate stakeholder dialogue, including potential investors, but as well labour representatives, farmers, traditional leaders, government departments and environmental activists;
- Identify concrete investment opportunities and attract investors, possibly from the Diaspora.

Thank you for your attention.

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