

AN EARLY POST-INDUSTRIAL BUSINESS OPPORTUNITY

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Since the creation of jobs in the so-called Third World is becoming more difficult and more expensive every year New Work has been developing the model of a Self-reliant Village, or also of a Self-reliant urban neighborhood. The basic idea is to provide the seriously poor with the technologies, tools, raw-materials and equipment so they can not only grow their own food, but can also generate their own electricity, and very much beyond that, make also their own cement, their own stoves, blankets and furniture, and surprisingly enough, can go still further and make also their own refrigerators, and even their own cameras and TV's and cell-phones.

Nothing is more evident than that this of course cannot be done if those in this "second economy" do not have the machines, tools, materials and technologies with which they can accomplish these tasks. In every case a new model of "post-industrial," or "de-centralized," or also "generative" manufacturing will be employed. This involves a combination of labor-intensive methods with a limited use of ultra-high-tech equipment. (The Fabricator.) The aim is to in steps achieve greater degrees of self-reliance.

On the one side it is a fact that in the last fifteen years a broad spectrum of inventions have brought us very much closer to the actual possibility of neighborhoods or villages that are self-reliant – far closer than those who have not studied these technologies are apt to imagine. On the other hand a formidable mass of additional inventions and developments still needs to be made to reach this point.

A host of new business opportunities lie therefore in two directions: One opportunity consists in the marketing and dissemination of already existing technologies, materials software and machines that can be used for a more self-reliant life-style, but that are so far not yet used in this way; the other opportunity lies in the development of the tools, materials, and technologies that will close the now still existing gap; i.e. the technologies that will take us the rest of the way, and make more self-reliant villages and neighborhoods a realistically possible and widely occurring life-form.

During the last three years New Work has established a presence in the Republic of South Africa and we have now reached the point where a number – possibly five or six – models

of self-reliant villages and urban neighborhoods will be built, probably within the next two to four years.

At the present stage a number of requirements have emerged for which the demand is most urgent and most immediate. These represent the most evident opportunities for mid-sized or small German companies. Here is a brief list:

- **Water Filtration:** a great many things will be done to make the most sparing use of the available water. Much of this is familiar and well known. (Shed-roofs, underground-containers, etc.) Distinctive of the self-reliant communities will be the addition of the re-cycling of water. (Purification of stored rainwater, of grey water etc.) The range of products that could facilitate this re-cycling of water is needed. (I.e. Filters, pumps, plumbing hardware. Containers, etc.)
- **The Generation of Electricity:** Photovoltaic cells are expensive and fragile. At the present transitional point we therefore favor the application of three devices. (1) The application of the latest generation of extremely clean and economical Diesel Engines. (Naturally, the further development of theses.) (2) The application (and further development) of the most advanced Stirling engines. (3) The further development and marketing of the "Generator kit." (I.e. of the complete wherewithal which would enable one to manufacture a simple generator, or the most important parts of a generator from re-cycled waste-materials.)
- **The Building of Greenhouses, Fish tanks etc.:** Needed for this, (but also a range of other uses) would be small, mobile units (small, mobile manufacturing shops) in which collected glass, and later also collected plastic could be remanufactured. Important for the early stages is an economic method for the production of the containers needed for the Vertical Gardens.
- **The general area of construction:** There exist several building systems (monolithic domes, ability forms, advanced forms of building with clay, blocks without mortar, etc.) that enable people with virtually no previous experience to build their own living

spaces and community centers. The development of machines, but also of mixtures of material (improvements over the traditional cement) that supports this self-building are crucial. The technology employed for “monolithic domes” could be improved; kits for the manufacturing of “geodesic domes” could be developed, machines for the more rapid production of building components of clay are currently in development, the wider application of the “bubble and spray” principle (used in monolithic domes) should be considered, etc.

- **Safe Stoves, Refrigerators and other kitchen and bathroom equipment:** The development of a safe stove, that can be self-manufactured through the combination of labor-intensive and ultra-high-tech methods represents a priority since deadly fires in slum-areas are a common occurrence. The manufacturing of small refrigerators that make use of far simpler and more advanced cooling devices than our current refrigerators is within reach and needs to be completed. Similar for other kitchen equipment, including pots and pans and etc.
- **The Mobile Phone Alternative:** The further development of the technology now used in “Walkie-Talkies.” Greater range, increased number of channels, outward appearance etc. Of special importance is the development of a community communication system. The possibility of combining these advanced walkie-talkies with the computers and TV’s in the Community Center should be explored.
- **Spare Parts for Vintage Cars:** The Fabricator is ideally suited for the single unit manufacturing of spare parts for otherwise well-preserved (and often highly elegant) cars extremely common in the Third World. This could become a widespread and highly lucrative business for self-reliant communities that clearly would have multiple other advantages. To bring this to fruition a very considerable effort in research and development has to be undertaken. That, too, could be performed in Germany.