



Metals and development

In a hearing on international trade, organized by the US Senate in 1984, General Alton D Slay, USAF (Ret) commented on the importance of the steel industry:

"Given the essentiality of steel to the production of armaments and to the maintenance of the infrastructure it is inconceivable to me that we could tolerate a situation where we must depend on foreign suppliers for steel in times of international crisis."

In closing his testimony, the General cited a comment in a paper prepared in the office of the General Counsel of the Central Intelligence Agency: "A nation which lacks access to means of defense production will not survive; a nation which has access only to means of defense production controlled by other nations may survive, but it will not retain its independence."¹

The remarks by General Slay illustrate not only the military importance of steel but also its role in the development of a national economy. This is important to keep in mind when we analyse the crisis of the iron and steel industry.

Structural changes and alternative development

During the mid 1960s, and early 70s the so called Newly Industrializing Countries (NICs) developed a national steel industry, often with the active support of Western financial institutions, TNCs in the machine and engineering industries and, more discretely, of governments and government agencies.²

The aim of this policy was to integrate these countries in the expanding world economy. In the present period of economic decline and shrinking markets, however, rivalry between nations and TNCs has become a dominant tendency (Cf Data on p 20-21 in this issue).

Today strong protectionist forces,

particularly in the US, are blaming steel producers in the NIC-countries for the steel crisis. However, this is, as Professor Edström points out (p 6 ff in this issue) a gross simplification of a complex process. The fact is that the NIC steel industry is to a large extent based on modern mills and highly efficient production.

It is important to stress, however, that the establishment of an integrated iron and steel industry is only a first, necessary but not sufficient, step in the industrializing of a country or a region. A recent UNIDO Meeting in Vienna emphasized the importance of vertical and horizontal linkages between industries, eg between the steel industry and the non-ferrous industry, as well as the necessity of regional and subregional cooperation. The UNIDO meeting also developed a number of other aspects on the integration of this important sector in a coherent industrialization policy:³

"In the Lima and New Delhi Declarations, full sovereignty over natural resources and effective control over their exploitation, transformation and marketing were considered to constitute for developing countries and indispensable condition for economic and social progress.

The Lima and New Delhi Plans of Action stressed the importance of developing countries achieving a progressively higher degree of domestic processing of their national resources. At the Fourth General Conference of UNIDO, it was stated that mineral processing promotes economic development and that, due to the process of restructuring that is taking place at the world-wide level, domestic processing of minerals in developing countries appears to be the trend of the 1980s.

The Industrial Development Board, at its seventeenth session in 1983, requested the Executive Director to start preliminary preparations for the possible holding of the First Consultation on

Erratum

We regret a number a typographical errors in Vol 3 No 3, especially in the first paragraph of the article by Paul Aarts which should read:

Until lately, OPEC-watchers — very much all alike — judged the international oil market in terms of the "OPEC-cartel that was able to bend the world to its will".

the Non-ferrous Metals Industries during the 1986-1987 biennium.

As a first step in preparation for the First Consultation on the Non-ferrous Metals Industries, UNIDO decided to convene the Expert Group Meeting in order to seek the advice of participants on the selection of key aspects to be considered at that Consultation.

Objectives

The objectives of the meeting were:

- to analyse the new patterns of development of the non-ferrous metals industries and the strategies of the main actors, within the context of the global restructuring process that is taking place in the world economy;
- to identify the possibilities, advantages and obstacles for a further processing of non-ferrous minerals in the developing countries that would lead to a more integrated and self-reliant development;
- to identify key issues that could be discussed at the First Consultation on the Non-ferrous Metals Industries.

Conclusions and recommendations

1. There is a need to *analyse the possibilities for a greater degree of processing of non-ferrous metals in the developing countries* within the framework of an overall concept of national, sub-regional and regional development that takes account of the inter-relations of the non-ferrous metals industries with other related industrial sectors, such as capital goods, iron and steel, construction, etc;
2. There is a need to *promote* within the context of an overall process of industrialization at the national, sub-regional and regional levels, *integrated forms of development* of the non-ferrous metals industries which are based on a detailed understanding of the ways in which the demand for final products affects the productive processes. Within this perspective of development, there is a need to define the type and degree of integra-

tion of the non-ferrous metals industries that is desirable and possible at the national, sub-regional and regional levels, as well as to examine the possibilities for most effectively using the international markets;

3. Because not all non-ferrous metal products can, in the near- and medium term, be effectively utilized in the producing countries and regions, it will be necessary to *promote the expansion of national and regional markets*, in addition to developing and expanding new uses of such products world-wide. In this context, attention should be given to recently developed and new approaches, including for example, the location of certain joint processing and manufacturing plants in the principal consuming countries, where appropriate and feasible, with the aim of removing barriers to sales in such markets and thereby gaining technological and managerial expertise;

4. Because of the changes in investment patterns which have appeared in the non-ferrous metals sector and the current severe restrictions on foreign exchange which developing countries are experiencing, there is a need to *put into practice new methods of financing*, which will permit a more effective use of the resources available to developing countries;

5. There is a need to *examine and develop*, in each of the non-ferrous metals industries, *alternative technologies and practices* which are appropriate to the scale of developing countries' economies and to the level and type of resources available to such countries, and which protect the environment and the health and safety of workers;

6. There is a need to examine past and present efforts of co-operation and to *put into practice new forms of co-operation* among developing countries and between developing and developed countries, in order to promote a more effective process of integrated industrial development in the developing world, taking due consideration of the devel-

oped countries' need for security of supply;

7. The possibility and desirability of *centralizing information available within the United Nations system* in the field of non-ferrous metals should be analysed with the aim of avoiding duplication of effort and achieving the maximum feasible dissemination of information which may already be available within the system;

8. As part of the process of preparation for the First Consultation on the Non-ferrous Metals Industries, UNIDO should *promote closer relations with the producer associations* in the non-ferrous metals field;

9. UNIDO, in its preparations of the First consultation on the Non-ferrous Metals Industries, should *sponsor meetings of experts at the sub-regional and regional level*, with the aim of examining the possibilities, advantages and barriers to an integrated and more self-reliant development of the non-ferrous metals industries at the sub-regional and national levels, as well as examining new forms of co-operation, financing and alternative technologies;

10. UNIDO should *prepare appropriate documentation* for the expert meetings and, in this context, should co-ordinate its efforts with universities and other institutions which are undertaking work in the non-ferrous metals sector at global, regional and sub-regional levels. ⁹

Notes:

¹ See for example: William T Hogan: "Pohang Steel Co continues to grow" in *Iron and Steel Engineer*, April 1985 p 32 ff.

² Quoted from the *Annual Report of the American Iron and Steel Institute*, p 7.

³ The excerpt is based upon *UNIDO/ID/WG. 436/5 — Report from Expert Group Meeting held in Vienna from 18—21 March 1985*. Mr Magnus Ericsson of the Raw Materials Group participated in the Expert Group Meeting, which was part of the preparation for the First Consultation on the Non-ferrous Metals Industry to be convened within UNIDO's System of Consultations in 1987. ■