Out-migration of highly-skilled labour force as a tool for sustainable economic development: The case of Jordan By Beatrice Knerr, Rasha Istaiteyeh, and Nadim Zaqqa

The flow of human capital from poorer to richer countries is a highly debated issue among development specialists from the academic as well as from the political sphere. It has reassumed importance since the early 1990ies as global demand for so-called "high-potentials" has significantly expanded, industrialized countries compete with each other to attract the most skilled and highest educated from economically less developed countries.

At the beginning of the 21st century, Jordan is one of the major suppliers of highly qualified labour force. An estimated 400.000 persons are earning their living outside the country's borders, most of them in the oil-producing Gulf States, but significant numbers also in Europe and the U.S. At the same time they send a large share of their income to their families back home. Since the mid-1970ies, migrants' remittances are Jordan's most important source of foreign exchange and a decisive factor in the country's economic development. In 2006, they amounted to US\$ 1.8 billion which is more than a quarter of the country's GDP. Facing the educational level of the out-migrants, however, fears have been expressed that this huge inflow of foreign exchange has been paid by a loss of human capital, a "brain drain" which would jeopardize the country's long-term economic development. Also, the permanent injections of foreign exchange which are not linked to activities of exporting industries might cause Dutch Disease, and thus impair economic growth.

On the other hand, the output of significantly more educated persons than the local labour market absorbs may be used as the basis for a successful "export strategy" of human capital, supplying in exchange a stream of remittance income, a general increase in the educational attainment of the population, and a backflow of experiences and skill-upgrading gained by the migrants while abroad.

Against that background, answers to the following questions are required

- 1. Under which circumstances does the out-migration of a highly-skilled person from Jordan imply a net benefit loss to the country, and under which circumstances is it a net benefit gain?
- 2. Have remittances caused Dutch Disease in the Jordan economy and thus endangered the development of sectors which produce internationally tradable products?
- 3. What is the role of returnees in Jordan's economic development?

Research about the macro-impact of out-migration of high potentials from Jordan is rare, however; but at the same time it is urgently needed, as a basis for sound policy-making in the country itself, and as a valuable experience from which other countries and other researchers could benefit for attaining their own objectives. Therefore, the presented project has turned to these open questions and has tried to fill the associated research gaps.

For measuring the economic impact of international labour migration, the process is decomposed into the elements a) loss of human capital; b) remittances; and b) return migration. The impact of these components is measured by different methodologies.

Ad a) The economic impact of out-migration of highly-skilled labour force from Jordan, as measured by the social return on investment in human capital in that case, has been assessed by applying a cost-benefit approach. The data used for that purpose were gained by a survey among highly educated migrants, focusing on teachers, engineers, physicians, and IT-specialists. The results of this analysis suggest that there is a net positive benefit of out-migration if the migrant had accomplished his higher education within Jordan. The extent of this return also depends on the situation on the specific labour market which determines the opportunity costs of his absence.

Ad b) The impact of remittances has been assessed by regression analysis, considering the effect on over-all economic growth, the development of different sectors of the economy (industry, manufacture, agriculture and services), on the price level (inflation), and on the exchange rate. Different time-lags were applied. The results reveal strong positive effects on the country's gross domestic product (GDP), the construction sector and on imports, while significantly negative effects turned out for the domestic agricultural sector and on exports. No significant inflationary effects showed up, essentially due to the country's limited foreign trade restrictions. Yet, there is an influence on the exchange rate which would reduce the competitiveness of domestic products on the world market..

Ad c) For an in-depth assessment of the role which returnees play for Jordan's economic development the sector of Higher Education has been selected. The reason for this choice is the fact that there is a strong international demand for Jordanian higher education services which is met by a growing number of state and private universities. These universities show preferences to employ returned migrants who usually receive an up-grading of their qualifications when abroad, and decisively contribute to attract foreign student. Depending on the universities and the faculties, in which they study, they pay a more or less large sum of tuition fees in US\$, and also spend money for their consumption and accommodation. This

has become an important and growing source of foreign exchange for Jordan. Similar reflections apply to the country's health sector which provides high-quality services for the whole MENA region. Project research in this area is going on, and (primary and secondary) data-collection and analysis will be finished in January 2009.

Altogether, preliminary results cast doubts on pessimistic views about the long-term impact of out-migration of highly-skilled labour force from Jordan. Although some sub-sectors of the economy might be disadvantaged, it seems that, considering all effects, Jordan's economic growth has been stimulated by the out-migration, and that this growth has sustainable components, which will continue to exist in the long term.