zation (HEDO), but also Small and Medium Enterprises Assistance Centre (SMEAC) and the Research Centre for Gender, Family and Environment in Development. They spoke about their experiences which were discussed against the findings of the project. The second workshop in the South was also attended by representatives of societal organizations but primarily by academics who study such organizations and social change in general. Comments and reports in Ho Chi Minh City struck a different tone. It was informative to learn that after years of work, sometimes under extreme circumstances, these activities are now appreciated and supported officially.

The project as well as the two workshops covered new ground and at times it was like walking on rather thin ice, if that metaphor is permitted in connection with a tropical country like Vietnam. A political foundation first embraced the idea quite enthusiastically and wanted to co-sponsor one workshop. However, later they quite unceremoniously retreated. An enormously tricky subject was the participation of foreigners. There were abrupt refusals, new proposals and sudden changes. All this did not diminish the interest in the topic of research but the actual pursuit of the work and the organization of the workshops were quite often confronted with irritating challenges. It must be gratefully acknowledged that throughout all the travails the Volkswagen Foundation was full of understanding and support.

Werner Pfennig

## Fourth Forum of the Collaboration Projects

## Tokyo, 18 - 21 February 2002

Funding for environmental research derives predominantly from national sources. But there are exceptions. The Japanese government has generously funded the so-called "Collaboration Projects", an international study programme on the two issues "aging society" and "sustainable development" with some 40 research groups from roughly twenty countries. From 18 to 21 February 2002, the Japanese Economic and Social Research Institute (ESRI) convened the Fourth Forum of these Collaboration Projects under the auspices of the Japanese Cabinet Office and with professional support from Nomura Research Institute (NRI).

The environmental sessions covered a wide range of issues, most notably on waste, climate change, energy and new policy options. In the area of waste management, CSERGE exemplified UK experience in Norfolk. Resources for the Future investigated specific contracts on incentives for recycling work in the US. Kazuhiro Ueta from Kyoto University as well as researchers from Mitsubishi and Nomura Research Institute described different regional waste management schemes.

Christian Egenhofer from the Centre for European Policy Studies (CEPS) and Carlo Carraro from Venice University covered the climate change issue, pointing out the strength of economic incentives, some institutional weaknesses of the Kyoto Protocol as well as current tasks of going ahead without the US.

Leo Schrattenholzer and A. Miketa from IIASA presented a long-term energy scenario, the "post-fossil fuel scenario" that illuminated emerging new energy sources such as ethanol, methanol and hydrogen. According to IIASA's analysis, reduction of  $CO_2$  emissions can only be met with these options, whereas any extension of fossil fuels would endanger the world's climate. Interestingly enough, the infrastructure for gas, which is currently expanding due to world market demand, can be used for other energy sources as well.

Koichiro Agata and colleagues from Waseda University highlighted some new policy options. They focussed on local action in the area of the provision of public goods, specifically featuring local currencies called LEMS. These currencies are designed in a way that allows combining the respective advantages of markets and local institutions, involvement of citizens, the unemployed as well as small- and medium-sized enterprises.

Raimund Bleischwitz and Peter Hennicke from the Wuppertal Institute presented findings on emerging regulatory policies of eco-efficiency, i.e. raw material taxes, demand-side management programmes, the German renewable energy act, distinct building policies and methods for raising energy efficiency of passenger cars. The arenas of business and consumption were also touched on with an ensuing analysis of how eco-efficiency can be fostered.

In a separate session, the great Japanese economist Hirofumi Uzawa presented his view on social overhead capital. According to his research, economies have exaggerated their investments in physical infrastructure, whereas natural and institutional capital have been largely neglected. A rebalancing process ought now to start that would result in decentralised wealth-creating via civil society and markets. In the discussion, he made a strong plea for architecture and new buildings serving human needs and desires for aesthetic forms.

Towards the end of the forum, Hiroshi Komiyama from Tokyo University enlightened the participants with his "Vision 2050". In this talk, he pointed out thresholds of thermo physics that are still remote to technical change and thus allow for further improvements. The potential for "green productivity" with increases up to a factor ten is thus still enormous. Designers and businessmen still have a huge window of opportunities for innovations – a pretty clear message! This message is all the more interesting as the Japanese government has established a "Factor Eight Committee" under the chair of Ryoichi Yamamoto from Tokyo University, which obviously follows a similar vein.

- Altogether, all international researchers very much enjoyed and appreciated the excellent platform for exchange. Two years of thorough research have come to a tentative end. The dissemination of the knowledge generated, however, now starts via ESRI website (www.esri.cao.go.jp), publications (e.g. Edward Elgar Publishers) and follow-up workshops. Follow-up programmes by Japanese and other sources can rely upon a sound cumulated basis for future research – let's get together!

Raimund Bleischwitz