

**Enhancing Research Capacity in Ukraine:
The Experience of IDRC
in Environmental Management Development in Ukraine (EMDU)
as Applied to the Rehabilitation of the Dnieper River
A Case Study**

by
Jean-H. Guilmette
Office for Central and Eastern Europe Initiatives
International Development Research Centre
P.O. Box 8500, Ottawa, Ontario Canada, K1G 3H9
e-mail: jguilmette@idrc.ca
<http://www.idrc.ca/oceei>

and

Igor Iskra
2-A Bankivska,
Kyiv-24, Ukraine
e-mail: iskra@idrc.kiev.ua

Abstract

Over the years, a majority of donors has progressively adopted similar contracting practices. Emphasis is put on "transferring technology" to perceived "knowledge poor" beneficiaries which, in combination to tied aid and/or rigid tendering processes has gradually resulted in the removal of beneficiaries from aid activities. Most often, beneficiaries of our generous assistance are not in charge of assessing and designing projects nor are they tasked with or involved in implementing them. Lastly, they are not part of evaluation process teams responsible for assessing results and drawing lessons from these activities. The practices, which often apply also in the case of "institutional building activities", result in disempowerment of the recipients and reduce buy-in to new ideas, behaviour and values implicit in each project. In addition to being condescending to beneficiaries, they obscure the capacity of indigenous institutions to provide adequate counselling to their own governments, in effect disenfranchising them. In essence, a vast majority of projects is managed by the donor agency in a supply driven turnkey fashion contrary to common sense and pedagogical experience.

In the following text, we will endeavour to explain IDRC's methodology and vision and describe the six year experiment in assisting Ukrainian institutions in researching and designing policies for the management of the Dnieper River. We will describe the strikingly different context prevalent in this transition country as compared with the South, the main outputs and results achieved. We will finally summarise the key lessons learned after six years of partnership in Ukraine.

IDRC's own presentation will be complemented by Dr. I. Iskra's findings as he will summarise the perceptions of a group of Ukrainian recipients and partners involved in IDRC's programme. He will stress "likes and dislikes" as well as key lessons-learned from this social and cooperation experiment.

*How do you teach new things to people?
By blending things they know with things they do not yet understand,
replied Picasso.*

1. IDRC

1.1 Legal foundation

The International Development Research Centre (IDRC) is a public corporation created by an Act of the Parliament of Canada in 1970. The main elements of the Act provide IDRC with its legal mandate "...to initiate, encourage, support and conduct research into the problems of the developing regions of the world and into the means for applying and adapting knowledge to the economic and social advancement of those regions." (full text of the Act is available at <http://www.idrc.ca/institution/eact.html>).

In order to enable IDRC to meet the challenges of its mandate, the Parliament of Canada determined that the Centre would benefit from an extraordinary degree of autonomy. It is not an agent in law of the government, nor are its employees government employees. Yet, despite this measure of political autonomy, IDRC remains accountable to the Parliament of Canada and its operations are audited annually by the Office of the Auditor General. Unique to IDRC as well is its governance structure. It is led by a 21 member international Board of Governors. Eleven governors, including the Chairperson, are from Canada, while of the remaining 10, historically, 8 or 9 have usually come from developing countries and the others from developed countries.

The core of IDRC's funding is a yearly grant from Parliament. While the grant is critical to IDRC's work, provisions in the Act allow the Centre to enter into a variety of joint-ventures and consortia. Currently, IDRC manages the funds and coordinates the implementation of more than 50 projects on behalf of private, bilateral, and multilateral organisations such as CIDA, USAID, SIDA, UNDP, WHO, UNICEF, the World Bank, and the Asian Development Bank.

IDRC works with governments, universities, private businesses, remote communities, development organisations, and international agencies throughout the world. It has experience in consensusbuilding and the development of multi-donor consortia for longterm support for research and training programmes; it was named by Canada as a lead organisation in the implementation of Agenda 21 at the UN Conference on Environment and Development in 1992. The Centre hires staff from around the world, basing them in Ottawa and in regional offices located in Cairo, Dakar, Johannesburg, Nairobi, New Delhi,

Montevideo, and Singapore, as well as in project offices, like that in Kyiv. It employs a multi-disciplinary team of scientists, technicians, managers, and policymakers with broad experience in the physical, social, life, and information sciences and is capable of administering large international projects. For support in its endeavours, IDRC draws upon a network of development experts from around the world. It has access to diverse networks of development thinkers and researchers, scientists, and policymakers world-wide and is unhampered by "tied aid" issues in choosing or hiring partners.

Over thirty years, the Centre has provided more than \$2 billion in support of over 5,000 research projects in 100 countries involving more than 20,000 researchers and 1,000 institutions.

1.2 The IDRC vision

The Centre believes that sustainable and equitable human activity depends on men's and women's control of their own social and economic progress, on commensurate access to knowledge of all kinds, and on an indigenous capacity to generate and apply knowledge. The mission of IDRC is "empowerment through knowledge," i.e., helping to optimise the creation, adaptation, and ownership of the knowledge that the people of developing countries judge to be of greatest relevance to their own prosperity, security, and equity. This mission represents an essential contribution to redressing the imbalances in global prosperity and access to knowledge.

It is vital that the peoples of developing and transition countries be in a position to control their own "knowledge-based" development. Therefore, strengthening capacity for research, independent policy analysis, and accessing knowledge are critical. Analytical capacity in these countries must be strengthened to ensure that they can contribute as informed participants in major international debates, e.g., WTO and climate change. They must be able to deal directly with issues of direct domestic concern, like governance and economic policy, where, in the absence of indigenous capacity, the analysis by external actors may be all that is available and will carry undue weight. These considerations influence the programme choices that IDRC makes.

IDRC recognises that respect for human rights and their promotion are integral parts of sustainable and equitable development, and are fundamental to research being carried out under conditions of intellectual liberty and unrestricted communication of results.

As written in the Parliamentary Act, IDRC is enjoined "to enlist the talents of natural and social scientists and technologists of Canada and other countries," "to encourage generally the coordination of international development research," and "to foster cooperation in research on development problems between the developed and developing regions for their mutual benefit." These have all provided and will continue to provide direction to the activities of the Centre. The cornerstone of IDRC's future work will be an ever stronger link to the aspirations and needs of the people in the developing and transition countries of the world. During the next five years, directed by the aims enshrined in the IDRC Act of 1970, the Centre will pursue the following strategic goals:

- to foster and to support the production, dissemination and application of research results leading to policies and technologies that enhance the lives of people;
- to mobilise and to strengthen the indigenous research capacity of developing countries, especially directed to achieving greater *social and economic equity*, better *management of the environment and natural resources*, and more *equitable access to information*;
- to establish or consolidate networks of research institutions that are focused on specific problems and are connected among themselves and with the broader global knowledge communities.

1.3 IDRC's methodology

Access to knowledge must be equitable. The ability to carry out analysis, to review options critically, and to write and to speak about them publicly - in short, to generate and to use knowledge - makes a vital contribution to social progress. This requires social innovation. There is no such thing as a technological fix. The technical ingenuity of humanity has far outstripped its ability to design and apply the policy, managerial, educational, governance, and institutional innovations required to improve well-being and to redress the stark inequities around us. Each society must devise its own solutions while learning what it can from the experience of others.

Organisations like IDRC must contribute to strengthening the scientific and analytical capacity of developing countries. In the Centre's case, this continues to mean creating opportunities for our developing and transition country partners to carry out research and to work as equals with their peers in the rest of the World. Developing and transition countries must be able to be full participants in the discussions and arrangements that are driving, and responding to, profound global changes.

In fulfilling its mission of "empowerment through knowledge," the Centre has concentrated on encouraging and supporting researchers in the developing world to carry out their work in their own institutions and, in so doing, has assisted the developing regions, as stated in the Act of Parliament, "...to build up the research capabilities, the innovative skills, and the institutions required to solve their problems." Unlike most development agencies, which hire outside consultants to study a problem, to conduct training, and to issue a report, IDRC's proven methodology utilises local institutions to determine their own needs and to carry out the necessary work. By looking first to indigenous institutions when providing research grants, IDRC not only helps to build self-confidence in those institutions, but also strengthens those institutions' research and technical capacities. Moreover, because research is carried out by locals for locals, a greater measure of "buy-in" is insured than if the work, however valid and technically sound, were carried out by outside consultants. A risk in using local capacity is that output quality can suffer: IDRC therefore uses its in-house expertise and world-wide networks of researchers and experts to guide researchers and to provide input and to bridge knowledge or technology gaps as needed.

As an example of IDRC's method, the need to establish baseline data on water quality in the Dnieper River was identified in 1993 by local and international agencies as the most

pressing need related to the management of the River. In order to carry out the study, IDRC brought together three Ukrainian institutions and granted them funding to perform the work. The institutions were the Institute of Hydro-biology, the Ukrainian Scientific Centre for the Protection of the Water (USCPW), and the Hydro-meteorology Institute. Interestingly, these three institutions had never worked together in the past. To add value to the contributions of the Ukrainian institutions, IDRC located and contracted expertise from two foreign research facilities, in this instance, two Canadian organisations well known for their proven capacity, The Canadian Centre for Inland Waters and the Fresh Water Institute of Winnipeg. Hands-on expert support was also provided through the purchase of specialised analytical equipment from United States, Canada and Germany.

The report on the condition of the River was first published in Ukraine by the Ministry of Environmental Protection and Nuclear Safety (MEPNS) and became the basis for the adoption by the Verhovna Rada (Parliament) of the National Policy for the Rehabilitation of the Dnieper. Bearing in mind this link, it can be argued that the report findings were immediately appropriated by local authorities and internalised. There was no need in fact for IDRC to sponsor intermediary policy papers. The findings of the study were eventually published in the *Water Quality Research Journal of Canada*.

2. IDRC and the Dnieper River

2.1 Summary of the project and its principal outputs

In 1993, Canada wanted to support Ukrainian efforts to rehabilitate the Dnieper River and asked IDRC to apply its techniques to this task. For this purpose, an initial budget of CAD 4 million was transferred to IDRC to manage a project named "Environmental Management Development in Ukraine," or EMDU. In 1997, a second phase was approved under CIDA financing; this phase will end in December 2000. During these six years approximately CAD 12 million will have been spent in Ukraine for that purpose, along with an additional estimated CAD 1 million in local contributions. Seventy research projects were carried out by local institutions ranging in value from CAD 35,000 to CAD 320,000. On average, 60% of the total funding was used as research grants managed by various Ukrainian research centres and institutions and the balance was spent to cover the cost of providing technical support and management services.

2.2 Immediate results

The various research activities have produced the following immediate results:

- Information about the state of the River was obtained and organised and a network of scientists and managers is now providing data on line for the management of the River.
- A National Programme for Rehabilitating the Dnieper and Improving Water Quality was approved by the Verhovna Rada. *Nearly all Ukrainian respondents interviewed*

stated that, among the most important results coming out of the EMDU cooperation experience was the drafting and implementation of this policy.

- Ukraine's Ministry of Environmental Protection and Nuclear Safety has taken measures to seek a USD 7 million grant from the Global Environment Facility (GEF) to define a Strategic Action Plan (SAP) for the rehabilitation of the River Basin and ameliorating its effects on the Black Sea.
- Environmental auditing and clean production concepts have been introduced and established. A group of Ukrainian scientists has formed a consortium to provide such audits nationally.
- Significant improvements in the provision of public utility services in the city of Zaporizhzhia have led to the approval of a loan by EBRD (USD 30 million) to upgrade water and sewer systems. In contrast, an adjacent city was refused a similar loan because it has not yet learned to provide utility services in a financially viable manner.
- Ukraine is now participating in an international network for testing and calibrating water quality using bio-testing methods.
- Civil society has increasingly become involved in the programme through outreach activities such as numerous television programmes for local stations and a web page.
- The effects of ramial chip wood on soil fertility is being tested and gradually proving to be a significant alternative to other, less environmentally friendly means of increasing soil fertility.

3. Learning to perform in "Terra Incognita"

3.1 Differentiating transition economies from the South

Twenty five years of partnership with the South did not fully prepare IDRC to meet the specific challenges prevailing in CIS countries. Eventually, we had to remind ourselves regularly that a vast majority of Asian, African and American countries shared many values and patterns of behaviour with us. Most Third World elites were trained in universities of the North, while they were made familiar with northern governance systems through years of colonial rule. At independence, Britain, France, the Netherlands, Portugal and Spain left behind various administrative and legal systems as well as diplomatic traditions that, for the most part, still operate today. In addition, most tenets of a market economy were never as profoundly challenged as they were under Soviet rule. On the other hand, countries under Soviet rule were closed for seven decades and missed out on many of the paradigm shifts that characterised western evolution in the twentieth century. In contrast with many countries in the South, education in CIS countries was widespread and diverse scientific institutions operated within a well structured system. Technological knowledge and equipment as well as the capacity to produce research equipment was well advanced, unlike the case of countries in the South.

3.2 Learning to function in a strikingly different context

Over the six years IDRC has been involved in the region, it has learned invaluable lessons and gained insights into the Ukrainian milieu. Many of the problems described below have been ameliorated in the last six years. IDRC has learned to be flexible, to work out backup schemes where possible, and to work closely through its local partners to remedy problems as they are foreseen or arise. Canada has benefited greatly in coming to understand better the local conditions, *modi operandi*, and local players, and hopes that other organisations as well can benefit from its acquired knowledge. The following are not intended as criticisms, but merely as observations of local conditions, particularly as they contrast with the more familiar conditions prevalent in the South.

- The postSoviet system now in place in the country is one of great volatility and discontinuity. Political uncertainties and quick changes are the norm as evidenced by various decrees that prevented funds transfers to Ukraine and suddenly taxed all imported goods as well as bank transfers, regardless of whether they were donated for humanitarian purposes or not.
- Some concepts, terminology, and practises did not exist under the Soviet system and thus are not well understood: namely, economic principles, like present value, mortgage, and collateral, are difficult to convey in a world that never employed them, while doubleentry bookkeeping as practised in the west is new to the region. The notion of "client" finds little echo in a world where people regularly lined up for basic commodities and were treated with contempt by sellers, while issues related to conflict of interest were blurred when only the Party's interests were at stake. Similarly, the tallying of local contributions to projects is fraught with uncertainty and difficulty, given the uncertainties regarding real costs and the distorted market under the Soviet system: in the past, the real value of time, land, and money was not costed. Equally, IDRC had problems understanding Ukrainian notions of banking, accounting, and decisionmaking methods.
- Secrecy and paranoia are symptoms stemming from fundamental survival strategies under the Soviet system. It results in many dysfunctional traits, the lack of cooperation and information sharing between sister organisations being one of them. IDRC found that it is not unusual for two or three organisations to be responsible for carrying out identical work, such as measuring water quality parameters. Different standards or testing methods may be employed by each, making meaningful data comparisons all but impossible. There was a tendency to hoard information as well. In carrying out Environmental Management Information projects, for example, some database information was obtained only with great difficulty from the responsible institutions. In all cases, IDRC worked through local government bodies to solve the problems and, when necessary, explored alternatives, as in the case of purchasing satellite maps from Canadian sources because Ukrainian versions were considered to be state secrets. IDRC also learned that the required information sharing will not happen automatically, especially given that the break-up of the Soviet Union severed most existing regional networks. Lingering paranoia remains at political and security levels as well. In one particular city, local security service officers removed data from projectrelated work and interrogated local participants who received training in Canada, causing significant delays in the project.

- As institutions in the region often were not plugged into international scientific networks, they seldom employed the internationally recognised standards of research one would assume. As the Ukrainian scientific community is overcoming its previous isolation and becoming better integrated into the international scene, the problem is shrinking.
- Topdown management methods are usually employed, whereby top managers issue orders and all those under them obey. There is little input from below, from those who might better understand the problems at hand and possible solutions. Partly as a result, personnel often seek "cookbook" solutions, as they are not accustomed to being given a free hand to manage the work under their expertise.
- Scientists and managers alike tend to focus on technological fixes to problems, rather than adjusting management practices to solve problems. This preference especially manifested itself in the audits and technologies projects, where technologies were already slated for purchase before an audit had adequately defined the nature of problem to be corrected. Audits demonstrated that many problems could be solved through improved management.
- IDRC's experts were surprised to discover the lack of technologically advanced equipment and computerisation, with little environmental data available in electronic media. The exchange of data over a computer network among participating institutions is a new development. Analytical equipment had to be purchased for participating laboratories. The whole research system of Ukraine is in dire need of reorganisation and retooling. As resources are extremely scarce, other priorities take precedence.
- Project implementation tends to move very slowly. In many cases, the sluggishness is due to political waffling or manoeuvring or from all decisions, even trivial ones, being referred to a higher authority. In others, it is a result of the poor economy, where workers may not get paid or buildings go unheated in winter; still in other cases, poor project management can be to blame. Schedules must therefore build in extra time to account for local conditions and project monitoring must take on great importance.
- Although Ukraine was a separate member of the UN, diplomacy was the prerogative of Moscow in Soviet times. At independence, laws, rules and practices had to be written in a context of uncertainty, the absence of precedents and traditions, and perceived abuses by so-called non-profit organisations, which often used charitable tax exceptions to conduct commercial but tax-free business. IDRC's status as an international non-profit organisation remains a subject of negotiations today; this lack of a clear status as a "not for profit" organisation constraints IDRC's ability to fully dispense research grants to local NGOs, institutions and bona fide organisations as it does elsewhere.

4. Western aid from the Ukrainian perspective

4.1 Moving away from the Soviet era

International technical assistance to Ukraine did not really exist before 1991, when Ukraine gained its independence. Receiving grant money, let alone receiving it from former foes, was, needless to say, a new concept. At first, some influential officials were even against the idea of receiving any "paltry dole" from "capitalistic hands"; the "self-sufficiency" ideology dominated, with the world changing faster than minds. Many perceived that western donor agencies were coming simply to collect data about the current status of science and to state the problems, but were not there to help resolve these problems. When the first years of independence passed and the economic miracles did not happen, politicians realised that structural changes were necessary and that without western money and know-how economic growth in Ukraine would remain elusive. Developed countries started to be perceived, not as source of danger, but as a source of funds and ideas. Fear and pride started to dissipate and Ukraine found itself in free competition with the South for the North's grant money. Yet, in the event, it became obvious that the absorptive capacity for western assistance was low.

- During the Soviet era, numerous research institutes and ministries were accustomed to abundant budget financing. In particular, fundamental research found favour in the state budget. The strategy for receiving financing was to submit a thick folio full of scientific jargon, very detailed background information, and a long list of references. Budgets consisted of only the total project sum, which was intentionally doubled or even tripled. Peer review and systems of checks and balances were not common practises. In effect, the most important factor for budget appropriation was related to an established network of decision makers, government officials, and civil servants. Therefore, positioning one's institution well in those networks ensured a regular flow of research funds.
- When international technical assistance became available, research institutes began using the same approach that they did in the past to get funds, with many perceiving the assistance as a continuation of budget funding. This was the first stumbling block for Ukrainian scientists and researchers looking for donor aid: the strategy that worked well for the Soviet bureaucratic machine became useless for foreign aid projects. Demands for "unwarranted details" were often perceived as captious or even espionage. It was feared that by answering such probing questions, scientist might run into problems with authorities. The flexibility shown by some donors, along with their tolerance and understanding, were the main reasons for the acceptance of technical assistance in the first years of Ukraine's independence.
- By the mid-1990s, almost all research institutions in Ukraine had had some exposure to the grant process. They formulated an assembly line approach to proposal preparation: identical proposals were sent to different donors, duplicate reports were submitted as outputs, and old data were used.
- By the late 1990s, proposals fell more in line with donors' demands: years of teaching and learning yielded fruit. Nonetheless, the technical and budgetary content remained poor.
- If in the early and mid-1990s only US, Canadian, and UN agencies were working in Ukraine in the environmental field, by the late 1990s Japan, the Netherlands, Denmark, and Finland also became active. Every donor has its own target areas, expectations, and, most importantly, implementation mechanism.

Unfortunately, most of the implementation mechanisms are alike: to spend as much money as possible in the donor country itself. Some donors even have rules that forbid recipients from buying equipment outside the donor's country, while others do not use local consultants, relying instead solely on expensive western consultants. The main outputs of such assistance are reports that often are not even read by local officials and decision-makers. For this reason, the Verhovna Rada and the Cabinet of Ministers admonished donor agencies. After much hesitation, international technical assistance was eventually exempted from VAT and import duties by President Kuchma's decree only on June 1, 1999, 8 years after independence. The exemption lasted exactly 2 months, with the Verhovna Rada overturning it on July 30, stating that the provisions of the proposed decree were insufficiently rigorous as "in many cases international assistance that is not required is given to Ukraine". In particular, the Verhovna Rada wished to ensure that such exemptions would not be turned into loopholes for tax-free commercial imports, nor become a means for western interests to rid themselves of poor quality products and services.

- A precedent for a new type of international technical assistance, which fully complies with national interests, was established by IDRC and implemented through EMDU, one of the first environmental technical assistance programmes in Ukraine. For many local environmental institutions, it was the first chance to communicate directly with an international agency. Scepticism and prudence were the main hallmarks of donor-recipient relations, with the recipient's approach to obtaining funds being simple and direct: give us a lump sum and we will solve a problem. Questions about project details, work schedules, methodology, and detailed budgets were not easily understood by recipient institutions. IDRC's flexibility and compromise-oriented philosophy later came to be greatly appreciated by the Ministry of Environmental Protection and Nuclear Safety.

The following two sections reflect the comments of Ukrainian partners in response to questions posed in interviews as described in Notes and References.

4.2 Perceived positive aspects of the IDRC programme

- There exists an atmosphere of trust, confidence, and real partnership between IDRC and Ukrainian recipients. IDRC's consultants and staff never force their views upon recipients but are open to discussing and exploring all avenues for solving problems.
- All project managers are local Ukrainians and they feel they have a great deal of independence, hiring necessary specialists, choosing appropriate equipment, approving trips within the project budget, etc. Using IDRC's approach, more money is spent locally and more money reaches Ukrainian scientists and consultants. No other donor agency in Ukraine spends 60% of its funds in the recipient country (taking into account the rent for the local IDRC office and local staff salaries the percentage is even higher).
- Many of the projects carried out under EMDU were very practical with outcomes that will last beyond the end of EMDU and funding from IDRC. Real tangible results can be seen going beyond the usual reports and publications whose utility to locals is

questionable. Among these are the river bank protection strip, the remediated landfill in Zaporizhzhia, modernised equipment for several audited enterprises, water treatment units for hospitals, kindergartens, and schools, et al.

- A large training component has allowed many Ukrainian specialists to upgrade their skills and qualifications in Canada and other countries. Many scientists participated in international workshops and conferences thanks to EMDU grants.

4.3 Perceived negative aspects of the IDRC programme

- What IDRC understood as benign intrusion in practising due diligence and enquiring about administrative and technical issues was regarded as severe probing by recipient institutions. IDRC's approval was expected to be forthright and simple. Sometimes recipients have to revise a proposal four or five times before IDRC approves it. This has led to the senior scientific adviser of IDRC being referred to as "Dr. Niet" (sic).
- Proposal approval, contract preparation, and transfers of funds can take much time. In the current poor economic conditions for many scientists in Ukraine, donor money is the only means of support and delays thus cause nervousness.
- The list of reports that have to be prepared, along with the final project outputs, is quite long. Many recipients do not see any real purpose and value with the preparation of some of these reports. Moreover, the list tends to grow over time. For instance, Results Base Management and time sheets for workers on the project were recently added, joining gender, training, and local contributions reports as a requirement.
- From the outset, IDRC suggested greater involvement of Ukrainian civil society, increased public participation, and NGO involvement. These ideas ran counter to seventy years of socialism and difficult to internalise. In the past, government officials flooded thousands of hectares of arable land and hundreds of villages without consultations in order to build a hydroelectric station on the Dnieper. With respect to NGOs, Ukrainian scientists granted them little credit as they perceived NGOs as lacking professionalism and being driven by emotions and political considerations. They also questioned NGO accountability. A few projects, however, met with strong opposition at the village level that had to be dealt with in a manner similar to that in any other democracy, through consultation and grass-root negotiations, thus vindicating IDRC's initial preoccupation.

5. Key solutions to new problems

To cope with this different environment, IDRC had to adapt quickly and tailor its approach to resolving unprecedented problems. In the South, IDRC provides research grants directly to local institutions by making use of one of its seven regional offices to transfer moneys and to provide technical and administrative support locally. This approach was impossible in Ukraine and different means had to be found. The cooperation of MEPNS became an essential element. The various Ministers and Deputy-ministers who oversaw MEPNS during those six years were determined to improve the quality of the water in the Dnieper,

or as transliterated from Ukrainian, Dnipro, and to make good on Canadian cooperation. Their full collaboration and strong commitment became a key ingredient in what we jointly like to believe became a success story.

5.1 Dealing with management issues

A local **Management Committee** was created at the outset of this diversified programme to provide coordination between various departments and research institutions and with IDRC. In October 1995, the Management Committee was empowered to draft policy, to set priorities, to allocate research resources, to select local partners, to assess proposals, and to review scientific results. In sum, the Committee was providing overall governance to the programme. It has proven to be an invaluable mechanism which corresponded well to the culture of the region. It provided needed discipline and rigour as well as a forum for discussing problems, raising issues, and debating new ideas. Most of all, it fully involved Ukraine and Ukrainians in every decision and significantly contributed to stimulating their feeling of ownership and responsibility. It may be argued that the Management Committee was the embryo of a peer review system. The commitment of Ukraine was constant and unfaltering throughout the duration of EMDU; despite the fact that two elections took place, the head of the Committee remained in place and the Committee continued meeting monthly.

5.2 Dealing with fiscal issues

The problem of disbursing funds for local research remained unresolved for some time. Faced with what can only be described as "predatory" fiscal systems, IDRC had no choice but to help MEPNS find a durable and practical solution for moving aid resources into the country. For that purpose, the **Dnipro Fund** was created based on a model initially operating in Poland. This newly created Ukrainian NGO was empowered to collect fines and grants and spend them for the purpose of improving the Dnieper's environment. This became the conduit of IDRC's grants to local research institutions and remains its only mechanism to this day. The Dnipro Fund has expanded its activities to promote environmental audits and it now functions as a fund raising and management facility in Belarus and Russia.

6. Learning together

6.1 Main lessons learned by Ukrainians

- EMDU, especially through the work of the Management Committee, allowed managers and many scientists to look at their problems more globally and to work as a team, especially when solving critical problems.
- Recipient institutions have learned how to prepare and submit proposals, conduct internationally recognised research, and write reports.
- Dealing with an increasingly vocal, if atomised, civil society was difficult at first. MEPNS officials and institute managers learned to adjust plans and environmental activities to meet the needs of people.

6.2 Lessons learned by IDRC from errors made

6.2.1 Concerning Gender equality policy

Every Canadian ODA sponsored project must comply to a gender policy and demonstrate results for each activity. For that purpose, IDRC hired in 1995 an "expensive" (sic) Canadian consultant to draft an assessment of the situation in Ukraine and propose a plan of action. Ukrainian partners remained sceptical of IDRC's efforts in promoting gender sensitivity and they still do not see this as a priority issue. The near complete lack of women in senior decisionmaking positions is not perceived as a problem so it follows that there is no need to modify current practises. Respondents to this current assessment argue that: "There is no infringement of women's rights in Ukraine, there are simply cultural and historical traditions for women to be housekeepers and family caretakers and to be away from policy and management matters. Why must the ratio of men to women be 50/50? We do not expect 50% of women to be anglers or hunters, so why would we expect this percentage among managers? Those women who wish to become managers can easily exercise their right to do so and there are examples among acting ministers and the Vice-Premier Minister."

The current situation in Ukraine regarding equality of rights and access to work by women has proven to be sophisticated and complex. Indeed, there is a barrier at the upper echelons of the country, which some local experts characterise as a "benevolent patriarchy." Women have full access to schooling even to university level, as well as to the workplace, yet the rules of an "old boys' club" constitute a handicap for many women to rise to senior positions. More importantly, however, the workload within the married couple is unevenly balanced, leaving the working woman with a very heavy burden. These two factors combine to incite many women not to seek high ranking positions. IDRC's current focus of environmental research activities does not lend itself to achieving much significant change. This specific barrier is not only misunderstood by the average male executive, but strongly denied when the issue is raised. Proselytising foreigners are unlikely to achieve much.

In the future, gender research by local institutions must be carried out to help understand the empirical nature of the barriers and document it in a manner that may be understood by Ukrainians. Making use of western experiences is not only often irrelevant but counter-productive, as Ukraine is far from a society where women are denied basic rights. Requiring proof of compliance to a foreign-imposed gender policy, as has been our practise, is more likely to breed cynicism and to raise traditional bureaucratic defence mechanisms than to give good results.

6.2.2 Concerning management

In beginning activities in Ukraine, IDRC received proposals that tended to look at budgets and work plans in very general terms; that is, budget and work packet breakdowns were, when included at all, often not very specific or well thought out, and little attention was paid

to what materials or labour actually cost. Organisations tended to ask for a large lump sum of money to perform nebulous work.

Faced with this inadequate documentation, IDRC organised in 1994 a training seminar to lecture heads of research institutes on how to prepare project documentation for western consumption. This attempt failed as it was perceived as condescending and irrelevant. Proposal preparation and project management improved immensely by the end of EMDU1 with hands-on advice and coaching from IDRC on a case by case basis and vigilance on the part of the Management Committee. This method may be time and resource costly, but regular progress has been observed once those budgetary demands were fully explained and understood as final.

7. Conclusions

7.1 IDRC's demand-driven methodology

As IDRC compared notes with other western organisations active in the region, the importance of capacity building methods and approaches became ever more apparent. It is useful to remind the audience at this juncture that there are four critical aspects for project delivery: 1) complete ownership by recipient countries 2) best financial and operational management 3) highest scientific and technical standards and 4) collaboration with other partners. It is essential to assure a good balance among these four complementary goals. However, experience has shown that in practise projects are often skewed in favour of one or the other of these goals; generally, priority is put on ensuring that all procurement and accounting procedures will be meticulously adhered to and pressure is put on foreign experts and consultants to obtain and demonstrate visible results as a result of "supply driven technical assistance." As a result:

- there is an over-emphasis on immediate, tangible results such as reports;
- local ownership and capacity building suffers;
- long-term sustainability is left in doubt.

In contrast, the demanddriven methodology of IDRC is now being heralded by Ukrainian authorities as a unique and effective model. Ukrainian partners have expressed a preference for the management methods employed in EMDU, bemoaning the fact that many other aid organisations do not operate in this manner but rather rely on extensive use of expensive foreign consultants. Recently, based on this experience, MEPNS has demanded that two donor agencies use the same implementation mechanism that IDRC does.

7.2 Acting pragmatically and focusing on concrete products

It became obvious from day one that pragmatism should govern our work in such a unique environment. As an example, one of IDRC's very first "research grants" was for the

gathering of telephone numbers within the Ministry of Environment Protection and Nuclear Safety and the publishing of a phone directory.

IDRC eventually realised that, during the Soviet era, the military was the only client that effectively took care of transforming a new technology into practical usage and deriving know-how. Highly trained scientists in Ukraine had acquired little experience in those fields and the search for improved know-how and management became our most pressing task.

Building on the existing science that they knew about and coaching the acquisition of new skills in know-how and management, we followed Picasso's pedagogy.

7.3 Changing mindsets and ensuring sustainability

By building relationships based on trust, carrying out business in an open and transparent fashion, relying on local partners as equals, employing local talent to the greatest possible degree, and choosing to build up local institutions to function without its help, IDRC has been able to achieve its goals.

In the end, the authors believe that important changes in the mindsets are being left behind. In particular, confidence and self-esteem are a most significant outcome of this programme. Scientists and managers have come to recognise themselves as a part of the world scientific elite and they now feel that their opinions are respected and can have an influence on policies. They feel capable of defending Ukrainian interests within the region and internationally. Second, the capacity to work cooperatively and to take decisions collegially has significantly been improved; this attitude is essential when dealing with protracted and complex environmental problems such as those that plague the Dnieper River.

IDRC and MEPNS have tried to develop a sustainable approach to capacity building. Will that method withstand the test of time? The answer will have to come at a future time.

Notes and References

Disclaimer

The ideas expressed in this paper are those of the authors and do not reflect the official position of IDRC.

Methodology

In preparing this survey, Dr. Iskra conducted a series of "unstructured interviews" with principal Ukrainian EMDU partners involved either at the management or at the scientific level. The interviews were conducted between August 21 and 31, 2000. The notes from these interviews have been summarised in section 4 and related observations have been inserted into section 5 and 6. The conclusions reached in section 7 are those of the authors of this paper.

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EMDU project reports and related texts are available at www.idrc.ca/oceei.

EMDU Managerial Structure

Approved by a joint MEPNS and Ministry of Economy decree, the Ukrainian Management Committee was created in 1994. It consists of high officials from MEPNS, the Ministry of Economy, the State Water Municipal Committee, Hydromet, the State Building Committee, the State Geological Committee, the National Academy of Sciences, and an environmental NGO, as well as directors of scientific-research institutes. The Committee selects and approves all proposals before submitting them to IDRC for final grant approval. The Committee oversees the process of project implementation and co-approves interim and final technical reports. The UMC takes responsibility for project outcomes and ensures the high quality of results. Its meetings are open to the local IDRC staff acting as observers.

IDRC has its own Programme Management Committee which reviews project proposals and practises due diligence. Twice a year, both Committees meet at a "Joint Management Committee" forum. This is the higher order of governance for the programme, providing a venue for final arbitrage on policy decisions.