



FROM THE CEO



The HSRC has undergone a metamorphosis during the four-year term of its current Council. This message is an overview of the process and its effect on the organisation's output and impact. It also includes my annual report on how we have fared with the targets for the last year.

The need for fundamental change was posed in 1997, a couple of years before this Council took office, by an external review commissioned by the Department of Science and Technology (DST). The review described the HSRC of the time as inward-looking, bureaucratically overweight, inadequately representative of the population, and producing work of uneven quality and relevance.

The management team addressed the challenge in phases, guided by the Council and its Audit Committee, and encouraged by the Minister, Deputy Minister and their officials.

The first phase involved restructuring and downsizing through retrenchments or voluntary severance packages, to achieve cost-savings and a reconfiguration of activities. A further phase of restructuring after I took office in August 2000 re-shaped and modernised the functions of the support services, while specifically aligning the research components to development priorities. The process involved consultation with the staff association, which subsequently amalgamated into the Public Servants Association (PSA) after negotiation of a recognition agreement.

By focusing research on users' needs, research earnings have multiplied ten-fold: from R6m to R61m between March 2000 and March 2003. This was accomplished in the face of a

Parliamentary grant that was shrinking in real terms. In addition to energetic tendering, foundation grants, which support more fundamental and long-term research than tenders, now comprise half of the research earnings. Half of the grants are now from foreign sources, often to support work in the southern African region as well as South Africa.

The complement of researchers has doubled since the restructuring, to 150 at July 2003, and the research share of total staff has risen from 30% to 56%. The proportion of researchers with masters or doctoral degrees increased from 68% to 91% (excluding interns on short contracts) between March 2000 and March 2003, and the proportion of researchers who are black increased from 36% to 48% in the same period. For the first time in the history of the HSRC black staff are now an overall majority. The proportion of women at the rank of director and above has edged up from 27% to 32%. From trailing way behind other major South African science councils (for which published evidence is available), the HSRC is now not far from the respective leaders, regarding earnings as a share of revenue and representivity.

Performance targets

The process has been guided by our COUPE strategy: **C**ontracts and grants, **O**utreach to collaborators, focus on **U**ser, **P**erformance regarding equity and efficiency, and scientific **E**xcellence. The strategy shapes the key performance areas and annual personal objectives for all research and support staff, and is monitored with suitable indicators for the organisation, as discussed below.

The shorter-term picture in regard to these aspects of our strategy may be seen in the table on page 5. One first sees that we considerably exceeded our Contracts and Grants target: research earnings now slightly exceed the HSRC's Parliamentary grant. Council will be wary of greatly further increasing earnings until the grant increases, lest the organisation becomes unduly driven by market pressures – a warning usefully sounded in the DST's national R&D strategy document.

The table also shows that, while our representivity improvement may have been impressive compared to other councils, it has been slower than we ourselves hoped, specifically regarding black researchers (our chosen indicator for Performance – Equity). There is room for improvement, especially at senior research levels.

Representivity quotas have therefore been set in assigning each Programme's vacancies, and Council has approved frameworks for accelerating both equity and capacity-building.

COUPE key performance indicators	2000/01 baseline	2001/02 achievement	2002/03 achievement	2002/03 target
Contracts and grants:				
Research earnings as a percentage of income	21	31	50	42
Outreach:				
Percentage of projects with external participation	22	62	51	60
User-orientation:				
Percentage of competitive tenders that are successful	24	32	33	34
Performance – Equity:				
Percentage of black researchers in research complement	40	45	48	54
Performance – Efficiency:				
Percentage of researchers in total staff	30	52	56	60
Excellence:				
Refereed journal articles, per researcher head, as percentage	23	23	55	50

Measures in this regard are improved provisions for study leave, a rapidly expanding research internship scheme and the reserving of researcher time for professional development.

Among the other four sentinel indicators in the table, a pleasing development is the surpassing of our target for Excellence, i.e. refereed journal publications per researcher. The organisation was close to two other targets – the proportions of tenders won, and of researchers in the total staff. It was short on projects involving outside collaborators only because of over-ambitious lifting of the target after last year's improvement.

The support services of the organisation have had to modernise in order to assist with all these developments with reduced staff. For instance, to be able to expand its capacity by recruiting researchers countrywide, the HSRC has opened additional offices in Cape Town, Durban, Bloemfontein and Port Elizabeth. These are linked by video-conferencing, share management information and research documentation on an intranet, and have increasingly "virtual" access to scientific literature. The next step, for which tendering has been completed, is to combine these advances into an integrated information system on a countrywide platform.

At the level of policies and procedures, modern and unified terms and conditions were negotiated with the new Union in a year-long process. A structured annual cycle is in place for prioritising, budgeting and reporting. The delegation of authority to the CEO and Executive Directors has been established, as required by the Public Finance Management Act. Risk management is being addressed through projects to establish a fraud prevention policy, audit IT and review corporate governance.

Research for development

This transformation has enabled the HSRC to tackle its goal of "social science that makes a difference". At the **macro-level** the central challenge faced by our country and our continent, as President Thabo Mbeki has emphasised, is poverty. It requires informed and co-ordinated Government intervention on half a dozen fronts: fostering employment and rural development; improving the skills and education of the population; combating HIV/AIDS and other widespread diseases; delivering social and infrastructural services to families and communities; and enhancing democratic participation.

Moreover, these advances need to be achieved in concert, among African countries linked by exchanges of goods, finance and people, and facing the harsh environment of globalisation. This is the core of NEPAD, and of our regional community, the Southern African Development Community (SADC).

To respond to these challenges, the HSRC radically restructured its research components and re-deployed its existing researchers. The organisation's research is now organised in ten (previously eleven) flexible interdisciplinary Programmes that work with one another as well as with science councils, tertiary institutions, NGOs and international agencies. This has enabled the organisation to develop the multi-project, multi-year and increasingly multi-country research endeavours demanded by the scale of the problems. Only 18 large projects, each worth R1m or more, accounted for two-thirds of all earnings during the last financial year. (At the same time, more than 130 medium or small projects were completed, indicating our accessibility to a range of users.)

The most conspicuous example of large-scale collaboration

concerns HIV/AIDS. The HSRC recently completed a pioneering R5m survey that measured HIV *prevalence* country-wide, with assistance from a fellow science council, a specialist NGO and international agencies. The survey drew on a special geo-referenced sample, to allow tracking of the households over time in subsequent research. Technical assistance will be provided to three neighbouring countries to do similar surveys, as a start to assembling the regional picture.

The *impact* of AIDS is being examined across several HSRC Research Programmes. Work is being done on the impact on service-provision by, and employees of, the health and education systems; on population projections; on the livelihoods of rural families and on land-tenure systems; and on employment in various economic sectors.

Other projects are researching viable *responses*: such as a massive project conducted by the HSRC with the involvement of NGOs and universities in three countries, to examine family and community strategies regarding orphans and vulnerable children; a similar project targeting pre- and early adolescents in KwaZulu-Natal; and several other studies on the efficacy of projects to prevent mother-to-child transmission of HIV.

Finally, all these efforts are *networked* to others in South Africa and the region through SAHARA, the Social Aspects of HIV/AIDS Research Alliance, recently funded for five years by an international agency. This articulation yields results that are applicable locally, but are also more broadly comparable, as required by SADC and NEPAD. The Highlights section mentions the contributions of the particular HSRC Programmes.

A second example of large-scale collaboration concerns education, skills development and employment. One Programme has complementary projects covering pupil inputs, post-school educational processes, industry linkages and student outputs. The results are shared through a web-accessible data warehouse. This Programme then engages with other Programmes in the HSRC conducting international comparative studies of maths and science school performance, labour-market forecasts of skills gaps in various sectors, the mobility of R&D workers and local government managerial capacity. Several of the projects will be replicated for users elsewhere in Africa.

The other priorities listed by President Mbeki are similarly covered by integration and collaboration among Programmes. This also allows important *themes* to be addressed. For example, gender researchers are networked so that the HSRC can take up topics as diverse as the experiences of female school pupils studying science, or suffering violence; and the needs of women

teachers, or women-headed households. Monitoring and evaluation is another theme: nearly all the Programmes have several projects at any time that are tracking and interpreting socio-economic trends, policy impact or implementation.

At the **meso-level** the HSRC participates in the DST's R&D strategy. One of the "missions" of the strategy covers science and technology for poverty reduction, for which the HSRC is one of three lead organisations. We collaborate with a fellow science council on a second mission, resource-based technology clusters; and our African Genome Project partnership informs a third, on biotechnology. We are assisting with the research framework for the Presidential National Commission on ICTs, which relates to a fourth mission.

Finally, at the **micro-level**, the HSRC specifically seeks to assist with the planning-information needs of DST itself, its sister department, Arts and Culture, and the Minister's National Advisory Council on Innovation: for example, recently completing a survey of the R&D sector, researching community arts centres and cultural heritage, updating the volume of biographies on South African women in science and exploring the mobility of knowledge workers.

Dissemination for impact

All these outputs need to reach not only the users who commissioned or funded them but also the HSRC's stakeholders and the wider public. Encouraged by the Parliamentary Portfolio Committee on ACST, the HSRC has improved its dissemination to increase its impact. Public reports are now available without charge on the web, as well as in print for a nominal fee. The bimonthly *HSRC Review*, summarising new projects and findings, is distributed to 8 000 stakeholders and high schools. Summaries are prepared for the opinion-pages of leading newspapers, and results are dissected at seminars with users and collaborators.

Does all this have impact where it counts? Various of our findings have been taken into departmental strategies or legislation, noted at Cabinet, and used to support or challenge Ministers. Our results are prominently covered in the newspapers every week. We are handling evaluations or impact assessments from small case studies to entire sectors. We increasingly receive special commissions, as "first port of call". Perhaps our soaring earnings, often from repeat funders and users, are the surest indication that, in helping them further democracy and development, our research is helping to "make a difference".

Dr Mark Orkin, President and CEO