RIGHTS&SCIENCE

Scientific Capacity Programme

The Human Rights & Science (RandS) is a social enterprise with the vision that everyone in all countries, women, men and children equally, are benefiting from all aspects of the internationally agreed human rights. The mission is to provide opportunities for all, to balance of the world's resources, share knowledge worldwide and to eradicate extreme poverty. The mission is achieved through scientific capacity strengthening, social enterprising, community services and integration. www.RandS.se

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Summary

It is a common knowledge that most of the scientific research performed in the world today addresses issue that is of concern for only to a minor part of the world´s population. Thus this programme aims at supporting scientific institutions in lower income countries by contributing to a favourable environment that will promote the initiation, management, dissemination and implementations of high quality scientific research. The programme aims at addressing the research topics chosen by the researchers themselves, thus both already prioritised but also neglected research areas relevant for lower income countries.

The operations are structured into support programmes and the support programmes are strategically designed. For example can it be noted that workshops are not offered as standalone activities, but are built into a larger context. A sequence of activities is offered until the goal of the support programme is reached and Target partners are self-sustained, both when it comes to education and logistics and as well as finances. Thus the activity must also have a build in component to generate a sustainable economy with time. The sequence of activities can include round tables with stakeholders such as representatives from the government, local authorities, private sector, civil society organisations, rural communities and media. The programmes can be modified to address a specific request, need or challenge. The support programmes include; developing high quality and relevant scientific projects, raising funds, scientific tools and methods, communicating with end-users, dissemination of research results, implementation of scientific results, entrepreneurship for researchers, and having access to functioning advanced scientific equipment

Each programme builds on the Real-time Outcome Planning and Evaluation tool (ROPE) which measures whether the support provided by the Programme partner enabled the Target partners to be successful. A team of senior professionals with extensive experience from scientific capacity strengthening programmes in lower income countries is ready to respond immediately to the implementation of the support programmes. The programme team has a strong commitment and are willing to do their very best to strengthen scientific capacity in lower income countries. The programme also benefits from a dynamic and well established network of individuals, NGO´s, CSO´s, academia, and enterprises which captures knowledge and experience of the situation on ground and ensures needs driven programme. The programme further builds on excellent previous results by its sister organisation Action10 (www.action10.org). Action10 has been operational since 2009 and is run by 30 contracted volunteer staff. The organisation has presence in seven countries through national development organisations. Assoc. Professor Cecilia has already held around 50 workshops on different scientific issues, in fifteen different countries in Africa, South America and South East Asia, during the last fifteen years and she has developed a deep understanding about the academic conditions in lower income countries.

RandS offers the services on a consultancy basis. It can also be possible to develop a joint grant application to get started. The design of the programme does always have a component of sustainable economy and institutional capacity. The programme has potential to start sustainable social enterprises, and RandS and the Programme partner may become business partners.

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1. Introduction

Scientific capacity strengthening

It is a common knowledge that most of the scientific research performed in the world today addresses issue that is of concern to only to a minor part of the world´s population. While research on a global scale is mainly driven by the higher income countries, this programme addresses the needs of lower income countries. The programme aims at supporting the research in lower income countries by contributing to a favourable environment that will facilitate the initiation, management, dissemination and implementations of high quality research. In terms of research topics, the programme supports relevant topic chosen by the Target country researchers. The programme aims at addressing prioritised but also neglected research areas relevant for lower income countries.

Vision

The vision of this programme is that everyone in all countries, women, men and children equally, has access to all aspects of the internationally agreed human rights. The vision is further that high quality research is performed in all countries, lower income and higher income countries equally, and that scientific issues concerning all people and all regions are equally addressed. Researchers in all countries, women and men equally, have sufficient opportunities and resources to do research. Potential scientific results beneficiaries are informed about the results and the appropriate findings are implemented.

Mission

To achieve the vision, researchers in lower income countries, women and men equally, are encouraged and supported with developing and managing scientific projects and with dissemination and implementation of scientific results. Emphasis is put on scientific quality, relevance and knowledge sharing. Support is provided to meet challenges identified by the researchers and other stakeholders in lower income countries. Training courses on scientific methodology, scientific tools and fundraising are arranged; facilitation is made for providing access to advanced scientific equipment, literature, field sites and scientific supervisors; networks are developed and maintained and the implementation and dissemination of research results is facilitated. The mission is further to adapt all programmes to the local conditions.

Expected outcome

The researchers shall benefit from the support and it shall enable them to develop quality and relevant research projects as well as attract the required research funding, have access to the required scientific equipment and disseminate and implement scientific results.

2. Operations

Goal oriented sequence of activities

RandS finds it important not to consider a workshop as a standalone activity, but to build the activity into a larger context. It is important to develop a sequence of workshops where each activity build on the outcome from the previous activity until the Target partners are self-sustained, both when it comes to education and logistics and as well as financially. The activity must have a build in component to generate a sustainable economy with time. The previous workshop structure also included round tables with stakeholders such as government representatives, the private sector and the media. It also included meetings with and visits to local communities. The purpose was to encourage a dialog between academia and society stakeholders, to capture topics that need to be researched as well as support the implementing scientific results. The workshops also contributed to the generation of sustainable networks between researchers.

Equal partnership

It is obvious that capacity strengthening programmes depend on the ownership among all stakeholders to be successful. Therefore all partners design and evaluate the programmes together. Thus the RandS programmes always aim for equal partnership within the programme team, where each partner contributes and benefits equally. Equal partnership is defined in this programme as a collaboration where partners take equal responsibility in the design and operations, are equally engaged with policy decisions, equally contributes to a sustainable economy and equally benefits from financial and programme outputs. A two-way reporting is used, with partners reporting equally much to each other. The strengths with an equal partnership approach are; i) open, frequent and transparent communication, ii) trust between the partners, and iii) activities benefiting fully from the knowledge and experience of stakeholders with different areas of expertise.

3. Support programmes

The operations in actual practice are structured into support programmes. The programmes can be restructured to perfectly address a specific request, need or challenge.

Support programme ONE
Developing high quality, relevant scientific projects and raising funds

- One week international or national **scientific methodology workshops** are arranged providing training on scientific methodology, access to scientific literature, communication between researchers and librarians, how to develop research proposals and how to approach donors in general. Information is also provided on specific funding opportunities and how to approach those. The workshops also include field visits and meetings with potential end-users of scientific result.
- **Round Table sessions** are arranged where researchers and potential end-users of scientific results are discussing the need of new research topics as well as compare already generated research results with actual needs. Researchers present their project ideas and potential end-users present research topics for which they perceive that research is needed. The session also addresses communication, dissemination and implementation strategies, and financial strategies.
  During the sessions: All stakeholders present themselves and what they bring to the table; Run a brainstorming during a defined period of time and conclude it; Narrow down the discussion towards expected outcome and outputs from the collaboration and method for collaboration; Agree on follow-ups, activity plan and where and when to meet again, and appoint a coordinator; Report summarising the Brainstorming session, Expected output and outcome, Method for collaboration, Activity plan; Information on next meeting and assigned coordinator.
- **Field visits** are arranged with the purpose of sharing knowledge about realities on the ground.
- After the workshops the participants receive **guidance and mentoring** from local partners and / or workshop resource persons on how to finalise their project proposals and submit them to grant giving organisation.
- Applicants, who were not successful with raising funds using their project proposals but were assessed as having good potential, can be invited to a **revision of application workshop**. After the workshops the participants receive guidance and support from local partners on how to finalise their project proposals and resubmit them to donors.
- In parallel **training is provided by a group of trainers** who have themselves participated in the scientific methodology workshops and have special skills supporting others as well as high scientific capacity. These trainers have been provided with training material and are supported through a trainer's network.

Support programme TWO
Research methods and tools, and communicating with potential end-users

- In a one week **workshop**, the researchers are invited to present their research methods, tools and the expected or achieved results, as well as the strategies for involving potential end-users. This enables researchers to learn from each other. **Senior researchers** also attend the workshops to support as resource persons. Each project is carefully addressed by at least one resource person, familiar with the research topic and with the scientific infrastructure, in

order to support and improve. Senior researcher may become **mentors** to junior researchers for the finalisation of the research projects discussed. The workshops also contain **lectures on research tools and research methods**. The research tools include, but are not limited to; participatory approaches, sampling methods, data collection design, statistical methods and chemical and physical analyses. Information is also shared on training opportunities offered by other stakeholders.

- **Field visits** are arranged with the purpose of sharing knowledge about the realities on the ground.
- The events also promote **networking** and seek to initiate new or strengthen already established networks.
- **Potential end-users** of scientific results are invited to listen to the scientific presentations in order to learn about research findings and on-going research and to provide feed-back to researchers on needs and challenges in actual practice.
- Potential **grant givers are approached** and invited for funding or co-funding of the research.

Support programme THREE
Dissemination of research results and scientific communication

- Once researchers have obtained quality scientific results, they can be assisted with preparing a **manuscript for publication**. This can be done through a workshop. These workshops typically last five days and focus on preparing a manuscript, selecting a journal and the publication process. During the workshop, researchers are supported by senior scientists and to improve their manuscript.
- After the workshop, researchers may be assigned **mentors**, who will continue to assist them while finalising the manuscript and submitting it for publication.
- Training is also provided on **oral presentations, power point** presentations and development of **posters** for conference presentations. Information is shared about organisations which offer grants for the participation in **scientific conferences**.
- Training is provided on the development of **policy briefs**.
- The art of **e-mailing** is discussed.
- Reflections on how to be a good **scientific supervisor** is shared.
- **Round Table sessions** are arranged between researchers and end-users of scientific result to share knowledge about the scientific findings, new areas that require research and dissemination strategies.

Support programme FOUR
Implementation of scientific results

The programme acts as a facilitator between senior researchers and end-users. End-users are defined as are those who can use or implement scientific results, including government bodies, local authorities, policy makers, development organisations, Civil Society Organisations, private sector, other academic bodies, grant givers and media. The justification for the programme is that researchers may or may not have interest, time and/or funding to go beyond scientific publishing. At the same time it may be difficult for the end-users to know which research results have been generated that they could benefit from. In addition researchers are not aware of which research topics that end-users may be interested in. To this end, research can be funded by end-users.

- **Physical meetings** are arranged between academic staff and potential end-users to identify national research priorities and ongoing developmental projects. The National Development Plan is presented. Implementation and funding strategies are discussed.
- **Round Table sessions** and other meeting platforms are arranged where researchers are provided with the opportunity to inform about research results and end-users about research needs. End-users are encouraged to submit prior to the meetings i) requests for research on identified topics, ii) communication, dissemination and implementation strategies, iii) financial strategies iv) social aspects of implementation. Researchers are encouraged to develop 2-4 pages of presentations of scientific results adapted to non-scientific readers. The meeting organiser supports well-structured discussions and output reports. Financial and social aspects of implementation are addressed. The end-users provide information on how research results can be implemented and through which resources. During the event implementation strategies of research results and products are developed.
- **Field visits** are arranged with the purpose of assessing direct implementation in the field.
- Potential **grant givers are approached** and invited to events with the purpose of attracting funding or co-funding of the implementation of scientific finding.
- **End-users and researchers are matched**. Each pair or group have meetings to identify activity and financial plans.

Support programme FIVE
Entrepreneurship for researchers

- Researchers are encouraged to bring their business ideas to a **workshop**. During the workshop each participant will have the opportunity to work on her on material and improve it. The trainees are expected to be able to develop a sound business plan. They shall also be able to assess whether a scientific result would have the potential of being commercial.
  The workshops address; how to develop a business model; making financial forecasts for the development of new business ventures; finance administration and accounting strategic communication and negotiation; intellectual property rights (IPR) including patents, copyright, designs and trademarks.
- **Round Table sessions** are arranged where researchers and potential end-users of scientific results are discussing the need of new research topics as well as compare already generated research results with actual needs.
- **Field visits** are arranged with the purpose of sharing knowledge about realities on the ground.

Support programme SIX
Functioning Advanced Scientific Equipment

Through the FAST programme (Functioning Advanced Scientific Equipment) support is provided on each issue related to having access to functioning advanced scientific equipment. The programme is presented elsewhere.

4. Train trainers

In parallel and within the workshops and the implementation of support programmes, training is provided for potential trainers. The potential trainers are selected by those who have special skills in supporting others, scientific capacity and training experience. Besides knowledge the trainers are provided with training material and are supported through a trainer's network.

5. Outcome planning and evaluation

Each programme builds on the Real-time Outcome Planning and Evaluation tool (ROPE) which measures whether the support provided by the Programme partner enabled the Target partners to be successful. ROPE is presented elsewhere.

6. The Programme team

A team of senior professionals with extensive experience from scientific capacity strengthening programmes in lower income countries is ready to respond immediately to the implementation of the support programmes. The programme team has a strong commitment and are willing to do their very best to strengthen scientific capacity in lower income countries.

The programme also benefits from a dynamic and well established network of individuals, NGO´s, CSO´s, academia, and enterprises which captures knowledge and experience of the situation on ground and ensures needs driven programme.

RandS has presence in seven countries and is hosted by national development organisations; S.E.VIE in Togo, IDEFOCS and GOLD in Liberia; Spell Africa and PSAN in Nigeria, BanaPads in Uganda, Genstainable in Colombia, LIP in Kenya and LINK-UP in Cameroon. The Partners ensures quality on terms of the local context.

7. Sustainable economy

RandS offers the services on a consultancy basis. It can also be possible to develop a joint grant application to get started. The design of the programme does always have a component of sustainable economy and institutional capacity. The programme has potential to start sustainable social enterprises, and RandS and the Programme partner may become equal business partners. During the initial phases, RandS often operates as a coordinator and facilitator.

Appendix 1
ROPE / Progress markers and output map

ROPE benefits from using the concept of "Outcome challenges[1]" to identify the challenges that the Target partner face in order to achieve their goals. The "Progress markers" are indicators measuring progress and reflect directly on the Outcome challenges. There are three levels of Progress markers depending on how difficult they are to achieve, where level one is most easy. Please find in Table 1 examples of Progress markers from the RandS Support programmes.

Table 1. Examples of Progress markers from the RandS Support programmes.

Level 1
The researchers seek support to develop research proposals for organisations providing such support.
The researchers seek skills in finding and using scientific literature on internet.
The researchers seek scientific supervision from senior researchers.
The researchers submit applications for research funding.
Level 2
The researchers revise projects that were not approved and resubmit to a donor.
The researchers achieve funds.
The researchers procure the scientific equipment required for the research
The researchers arrange with the required transport to field sites.
The researchers initiate a scientific study.
The researchers connect with established teams and networks.
The researchers achieve funds from more than one donor.
The researchers support colleagues to have access to research grants.
The researchers develop and maintain new research teams.
The researchers build and maintain new formal and informal networks where established ones are lacking.
The researchers influence the university management to provide training on scientific methodology and fundraising.
The researchers influence the university management to develop procedures on equipment management.
Level 3
Among researchers in all countries there are equally many women as men.
An equal amount of research is addressing lower income country issues as higher income country issues.

Output map
The Output map compiles outputs, which are the expected result of the activities that the partners take on as a result of the Progress markers. Causal actions are directly related to the desired outcome and have a single purpose, persuasive actions are indirectly related to the desired outcome or attempts to produce the desired outcome indirectly, and supportive actions relate to providing and fostering an environment that enables or encourages the desired outcome with very little direct bearing on it. Please find in Table 2 examples of an Output map from the RandS Support programmes.

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[1] RandS defines outputs as activities that we have control over and these are compiled in the Output map, Outcomes are the desired results of outputs and something we do not have control over. The progress markers address outcomes and not outputs.

Table 2. Examples of an Output map from the RandS Scientific capacity programme.

	Casual	Persuasive	Supportive
Individual	Training on the use service and maintenance of scientific equipment. Support to present research results at conferences. Compilation of review comments and forwarding these to each applicant.	Scientific methodology workshops where research projects are developed. Scientific international review of research proposals submitted to grant givers. Revision of research proposal workshops addressing the feed-back from the international review.	Targeted support to women researchers by addressing role-models, providing lap-top to facilitate works from home and accepting longer more time when preparing applications due to expected family responsibilities. Guidance and support to each workshop participant by local partner or resource persons to facilitate submission of applications to grant givers. Provide information on tools for having access to literature on internet generally. Procurement, service and maintenance of equipment at universities.
Environ-ment	RandS visibility activities. Appoint scientific advisors. Train trainer workshops.	Reaching out for more women researchers by tailoring the wording in the invitations and by appointing women role-models.	Provision of workshop programmes on scientific methodology for Universities to be used in their education schemes. Recruit and maintain a network of senior scientific advisors. Support to formal and informal networks, addressing scientific issues and equipment.

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