SCaN

SaciWATERs-CapNet Network

# Annual Report 2019

Cap-Net

UNDP

*Empowered lives.*
*Resilient nations.*

# Contents

# 1. About SCaN

SCaN comprises of autonomous regional and national institutions and individuals committed to building capacity of water professionals across South Asia. Established in 2009, SCaN has successfully initiated activities in collaboration with various national, regional and international organizations. Through its capacity-building activities, it has been able to reach a diverse group of stakeholders such as academics, researchers, policymakers, donors and implementers. Realizing the enormous demand for capacity building in the water sector across the region, SCaN plans to expand its activities manifold to further reach many more institutions and individuals.
Over the years SCaN network has built a strong network with the country-level partners across South Asia. These partners further have their individual network partners who work very closely with the local communities. These network partners include stakeholders such as local governments, non-governmental organizations, academic institutions, think tanks, and community-based organizations. These stakeholders consult and discuss issues with each other at different levels at various forums including SCaN. These forums bring back local specific issues to the regional SCaN network – facilitating SCaN to develop appropriate strategies that could direct a positive change for the communities.

The SCaN aims to provide a platform to academics, researchers, and professionals from government, non-government, public and private for working in together towards strengthening the human and institutional capacity in IWRM in South Asia. SaciWATERs hosts the network and acts as its legal, administrative and financial umbrella. SaciWATERs facilitates these programs by providing financial as well as human resources to conduct capacity building/training programmes.

## 1.1. Vision

To strengthen the human and institutional capacity by adopting an integrated approach within the water sector in the South Asia region through education & training; research; knowledge development; advocacy; and networking.

## 1.2. Objectives

- Facilitate network members to conduct capacity building programs in IWRM through partnerships;
- Provide network members with a platform for sharing skills, expertise and resources to strengthen and enhance their efforts and impacts in IWRM;
- Expand multidisciplinary knowledge base in IWRM and its reach in the water sector.

## 1.3. SCaN activities

SCaN has involved through:

- Capacity building of professionals, community members, government officials, representatives of decentralized institutions on issues of gender, governance, sustainable water resource management, and climate change in the framework of IWRM,
- Development of training modules/manuals for education and capacity building on IWRM,
- Support educational training programs and fellowships for young professionals to promote an interdisciplinary approach on water discourses,
- Promotion of networks and institutional strengthening through the engagement of private and public sectors in South Asia.

## 1.4. SCaN Future Plan

SCaN plans to establish a board with representatives from South Asia.

- SCaN to evolve as a strong network for capacity building, education, research, advocacy and knowledge mobilization centre in South Asia that focuses on the water sector.
- SCaN functions as an independent body within SaciWATERs and over the years plan to attain financial sustainability.
- Promote greater participation of network members in planning SCaN activities.
- Develop strong partnerships with South Asian Government Institutions for capacity building, knowledge sharing on issues of gender, governance, agriculture, transboundary water management, and climate change in the framework of IWRM.
- Create platforms of researchers and practitioners for knowledge mobilization more at South Asia level.

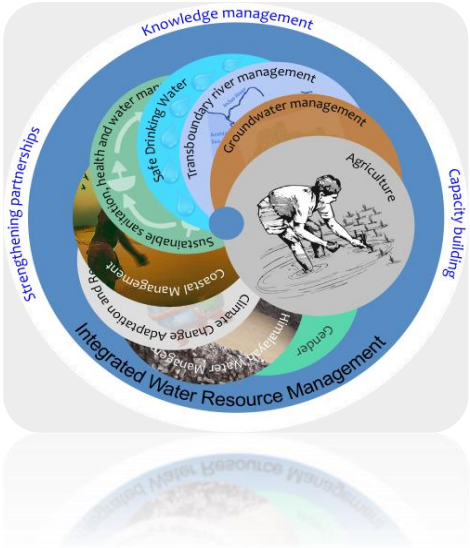
## 1.5. Strategy

Cap-Net in 2013 aligned its vision and mission with the UNDP Strategic Plan (2013-2018) that emphasizes support to the capacity building which will lead to enhancing national and local capacities for human development. The strategy for 2013-2018 is further aligned to the overarching strategy of the UNDP's Water and Ocean Governance Programme (WOGP) that envisages a world in which management, development and use of water and ocean resources is sustained and where there is accelerated effort to universal access to safe household water supply and improved sanitation. The UNDP WOGP programmes are addressed by Cap-Net, with limited focus on ocean resources but looking at coastal zone management as a new thematic area. SCaN in 2019 has realigned its strategy and focus areas considered the revised UNDP WOGP 2019.

In line with Cap-Net's strategic plan 2013-2018, SCaN in South Asia is faced with different challenges in water resource management across the diverse geographical regions from the Alpine climate in the mountains, vast Gangetic plains to the Deltas, semi-arid and the coastal zones. SCaN with its vision to strengthen human and

institutional capacity in IWRM across South Asia has identified the broad key focus areas applicable in these diverse geographical regions:

- Groundwater management
- Transboundary river management
- Safe Drinking Water
- Sustainable sanitation, health and water management
- Agriculture
- Climate Change Adaptation and Resilience Building
- Gender
- Coastal Management
- Himalayan Water Management




To address the focus areas, SCaN with its vision has identified three goals that align with Cap-Net until 2019:

Capacity building: To develop the capacity of institutions and individuals to manage, and use water, and to adapt to the increasing climate variability within a context that addresses, human rights, gender equity, and sustainable livelihoods
Strengthening partnerships:
To improve water management practices by:

- Using effective networks of capacity developers to impact on the ground, and
- Developing partnerships with international agencies to improve their outreach and collaboration on capacity development.
- Knowledge management: To develop and implement knowledge management systems in response (innovative capacity development), that ensure access to the best of international and local knowledge for all, measure the effectiveness of capacity development services and review indicators and monitoring systems.

Until 2019 SCaN intends to engage with private and public sector organizations through:

Private and public sectors as a receipt as both sectors are major, if not a major user, consumer and polluter. Therefore, the private and public sector is the main target group to develop the capacity to achieve sustainable water management/ development.
Private and public sector as a donor: The private sector can not only engage through their corporate social responsibility budgets but could also become partners or sponsors of Cap-Net UNDP/SCaN efforts.

The private sector as a partner in capacity development in sustainable water management: The private sector plays an important role as commercial providers of capacity development in the water sector. IT private entities for example have

developed many systems and databases which can be used by Cap-Net UNDP/SCaN in furthering efforts in innovative capacity development (e-learning and other platforms). Some tools for implementation (e.g. models, serious games, role plays and computational knowledge engines) are developed and owned by private sector organizations and these can be used in partnership with Cap-Net UNDP/SCaN, e.g. in providing practical tools for water management at a catchment or river basin area.

Public sector as a partner in capacity building in sustainable water management: The public sector as institutions has an important role in national program design and planning. Partnering to capacitate institutions with evolving nuances on sustainable water management will support, assist researchers and practitioners for knowledge mobilization and address the emerging challenges with drivers of change in the water sector.

The private sector as a driver of demand for capacity development products: The private sector is acknowledged as the driver for demand of specific capacity development products. It is the expectation for Cap-Net to be able to respond to such demands and be able to fulfil the knowledge and expertise gap expressed by private sector organizations.

## 2. Summary of Activities

| Topic | Date & Place | Organizer | Partner/ co-organizer | Participants | | | Month planned for outcome monitoring | Leverage Effect of financial contribution | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Male | Female | Total | | Cap-Net financial contribution | Partners financial contribution | In-kind partner contribution |
| **Capacity development trainings** | | | | | | | | | | |
| LEADERSHIP AND RESEARCH METHODS FOR INTERDISCIPLINARY WATER RESEARCH | August 26 to September 7 2019 in Kathmandu, Nepal | Centre for Water Resources, Anna University, Chennai | International Development Research Centre (IDRC) Canada, Scan(SaciWATERs and Cap-Net Network) | 06 | 26 | 32 | August 2019 | **5,856** | **44,267** | |
| District Platform for Arsenic Mitigation: Training and Capacity building of stakeholders | September 13 to September 29, 2019 in Buxer, Bhagalpur, Jorhat and Nalbari | SaciWATERs | European Union, UNICEF, Scan(SaciWATERs and Cap-Net Network) | 167 | 74 | 241 | September 2019 | **3,385** | **3418.8** | |

# 3. Capacity Building Activities

## 3.1. Leadership and research methods for interdisciplinary water research

From 26 August to 7 September SaciWATERs and Anna University with funding from IDRC, Canada and UNDP Cap-Net (SCaN: SaciWATERs Cap-Net Network) held a regional training workshop on 'Leadership and research methods for interdisciplinary water research' in Chennai, India.

This workshop was part of the fellowship program on "South Asian Water (SAWA) Leadership Program on Climate Change", coordinated by the South Asia Consortium for Interdisciplinary Water Resources Studies (SaciWATERs).

The workshop had two key goals:

- To build the capacities of the SAWA fellows in understanding climate change and water insecurity through the application of interdisciplinary research methods that include gender and social approaches,
- To develop leadership skills through activities such as team-building sessions, communication skills, application of negotiations and conflict resolution in the field.

The 13 days training program was designed in such a manner that students can get an understanding of research methods and theoretical frameworks for interdisciplinary water research. It also included a strong component of conceptualization and application of gender. In addition to classroom teaching, the training had a strong fieldwork component to ensure that the fellows could apply what they have learnt; both in terms of research methods and leadership.

The fieldwork was carried out in Kovalam (Covelong), Chennai for three days and it had to purposes. One wherein they applied research methods that they learnt to answer the question on "what are the differences in access and use of water and adaptations to water scarcity and excesses within different sections of the community, grouped by gender, class, caste and ethnicity? What are the intersections between these social axes with respect to water access and use?". Secondly the students picked various perspectives from the community (fisherman, Salt pan workers, restaurant and hotel owners) to understand the quality and accessibility of the groundwater, the impact of climate change as well as environmental changes and its impact on livelihoods occurred over time and used their mediation skills with different sections of the community to come up with the best common solution and adaptation strategies with justice and equity as guiding principles.

Besides knowledge sharing and field exposure, a two-day write-shop was also organised to enhance the skills of the fellows in research paper writing. Three groups presented their research findings on the last day of the workshop, while the external experts provided useful suggestions on improving the research paper for further submission for a joint publication.


## 3.2. District platform for arsenic mitigation: Training and capacity building for stakeholders

On 13-28 September, a series of two-day capacity-building workshops for stakeholders were conducted in four Indian districts – Buxar, Bhagalpur (Bihar) Nalbari, and Jorhat (Assam). – with the support of SCaN, SaciWATERs- Cap-Net Network and the European Union.

SaciWATERs has been working with these four district administrations and relevant stakeholders in the past to establish a district-level,people-centric platform for addressing arsenic challenges. The workshops provided capacity building on these issues and the platform.

Facts show that India faces a severe drinking water crisis with more than 50 million people exposed to arsenic-contaminated groundwater. There are several regions in the country, particularly the Brahmaputra-Ganga- Meghna Basin that is affected by arsenic contamination and has no access or very limited access to safe drinking water. Prolonged consumption of arsenic-contaminated water leads to several human diseases, such as skin lesions, lung cancer or mental instability.

There are various arsenic mitigation options available. However, because of the lack of awareness, know-how and inadequate knowledge about arsenic's impact on the surrounding environment and human health, the appropriate mitigations options have not reached the main stakeholders in the communities.

The capacity-building workshop had three key goals:

1) Understanding arsenic as a pollutant of water and its effect on human health.

2) Learning about individual and community level arsenic mitigation measures as well as understanding the various local level alternative water sources.

3) Understanding the roles and responsibilities of different stakeholders and institutions for the sustainable mitigation of arsenic.

The training program included classroom session, open discussions and field visit. In the classroom sessions, the participants were introduced to the concept of arsenic and its impact on human health, the role of nutrition for the prevention of arsenicosis, alternative safe water sources (rainwater harvesting, pond rejuvenation etc.) and arsenic removal technologies. A total of 248 people were trained across the 4 districts and among them 30% were female.

During the workshops, two technologies were piloted. One was “Arsiron Nilogan” developed by Tezpur University, Assam and the other was “Bio sand filter” developed by Sehgal Foundation, Delhi. Their installation, costs and operational procedures and maintenance (O&M) were discussed. Besides, a separate session was conducted for the plant operators of the water supply schemes, engineers, PRI members and representatives of water users committee regarding the operation & maintenance and community role for sustaining Public Water Supply Schemes (PWSS). This was followed by a field visit.

The training workshops have strengthened the capacity and knowledge of the participants about the arsenic mitigation measures and it is expected that the participants can implement and manage the tested technologies and other mitigation measures in their respective areas. The participants of the training program are now equipped to raise awareness and conduct training for other groups about arsenic and its mitigation measures in a cascade mode to ensure that learning, awareness and capacities to deal with the issue spread naturally and exponentially across affected communities.

Apart from these two training programs, another country-level program entitled "capacity building of swachhata prerak(volunteers) in cyclone-affected area on water and sanitation in Kendrapara, district, Odisha" was planned with Institute of Rural Development and Planning (IRDP), Orissa, India. However, the program was not possible to organize due to some technical difficulties with the organization. However, SCaN would try to carry forward this program next year given everything is fine with the organization.

## 4. Networking and Knowledge Development

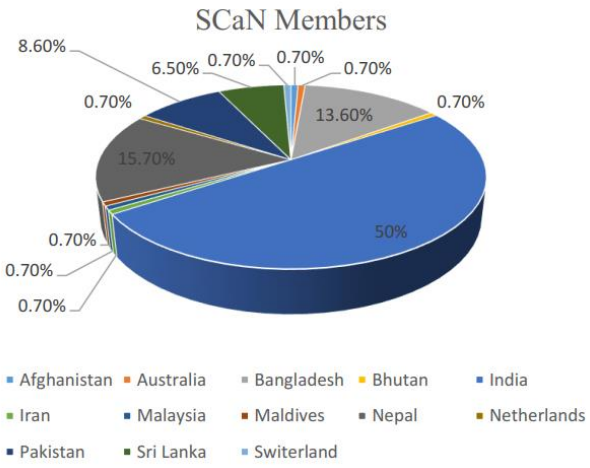
### 4.1. SCaN Board

Although SCaN in 2015 established the first formal governance structure, unfortunately, due to lack of funding possibilities, the transition from UNOPS to GWP and change in the leadership the network has not been able to organise the Board meeting.

In 2020, the Network proposes to conduct a virtual meeting of the Board members using the online platform of Cap-Net Virtual Campus.

### 4.2. SCaN Membership

In 2019, 09 individuals (03 Male and 06 Female) and 02 institutions from South Asia have joined the SCaN Network. The total SCaN membership with details in 2019 reached to 147 members. Out of the 02 institutes, one is from Kathmandu, Nepal and another one is from Gujarat, India.

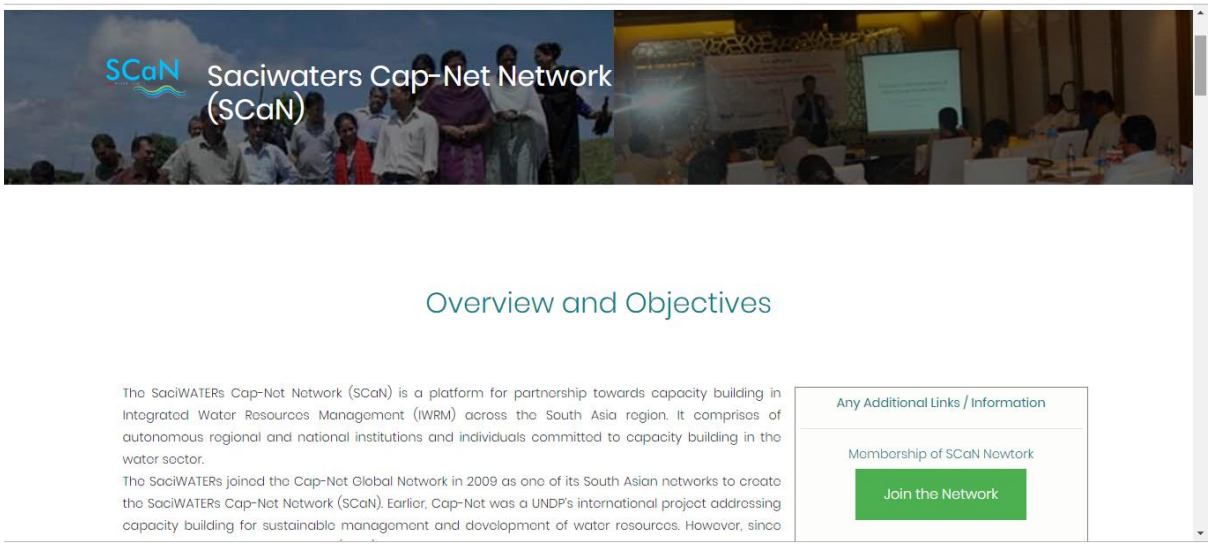



The SCaN network members chart reveals a majority of the members belong to India (59), followed by Nepal (20) and Bangladesh (17). There is an increasing proportion of memberships from outside the region such as Australia, Iran, The Netherlands, and Switzerland.

## 4.3. Website

SCaN webpage is hosted at SaciWATERs website and regularly updated providing details of the members and the resources. The website contains additional resources from Cap-Net and CAWST. In 2019, SaciWATERs has created a new webpage for the SCaN Cap-net network. The link to the webpage is http://www.saciwaters.org/new1/scan.php and the website is www.saciwaters.org/scan

*Figure 1 SCaN Webpage*




## 4.4. Monitoring, Evaluation and Learning Plan (MELP)

The training evaluation process has the potential to provide useful information to multiple stakeholder groups. By designing an effective training evaluation process, an

organization can obtain the information needed to improve both training program delivery and business performance, creating opportunities for continuous organizational improvement. Evaluation of training means measuring the effectiveness of a training program. Evaluation helps in defining the learning outcomes more sharply, remove unnecessary training content, and ensure that the training method meets the training needs of the participants (learners) and consequently of the program. This effectiveness is as much about short-term retention as about the long term retention and application by learners. The purpose of this Evaluation is to assess the effectiveness of the training events carried out for participants.

During 2018, two capacity-building activities (CBA) were organized by SaciWATERs Cap-Net Network (SCaN). These activities led to the expansion of networking and knowledge development activities. These CBA were essential of regional focus on Civil Society Organization's (CSO) engagement with WASH and training of Swachhata Doot under the Swachha Bharat Abhiyan (National Sanitation Program) of Government of India and also academic institutes involved in interdisciplinary research methods in the area of climate change and integrated water resource management, equity and gender, etc.

Both the activities have been selected for evaluation to understand the training outcomes and impacts that have benefitted the participants professionally and individually. Besides, the evaluation is also carried out with the intent to identify the aspects of designing need-based training where further emphasis is needed in future. These two capacity-building activities are:

1. 1st SAWA Regional Workshop on leadership and research methods for interdisciplinary water research
2. Capacity building of ward members on water and sanitation in Kendrapara, district, Odisha

Both the CBAs were evaluated through a survey method in which evaluation tool, i.e., questionnaire was modified to suit the context of each CBAs. For the 1st SAWA regional workshop for the convenience of the participants to respond to the survey, the questionnaire was designed as a Google Form and was shared with all the participants through e-mail. On the other hand, for the capacity building activity of ward members on water and sanitation in Kendrapara, district, Odisha Interviews were conducted with the selected participants (random sampling method) using questionnaires designed for each target group. As the participants were from the grassroots level and only understand the native language (Odiya), IRDP helped to conduct the survey.

The CBAs were evaluated in October 2019.

| Sl.No. | Activity | Date | Venue | Partners | Countries Covered | Participants | | | Outcome Reporting (Y/N) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Male | Female | Total | |
| 1. | 1st SAWA Regional Workshop | August 24 to September 5, 2018 | Kathmandu, Nepal | Nepal Engineering College, Bangladesh University of Engineering and Technology, Post Graduation Institute of Agriculture, Centre for Water Resources, Anna University, SaciWATERs, IDRC, UNDP Cap-Net, SCaN | India, Bangladesh, Nepal, Sri Lanka | 02 | 13 | 15 | Y |
| 2. | Capacity building of ward members on water and sanitation in Kendrapara, district, Odisha | October 15 to October 25, 2018 | Kendrapara, Orissa, India | IRDP, UNDP Cap-Net, SCaN, SaciWATERs. | India | 153 | 57 | 210 | Y |

The Monitoring, Evaluation and Learning Plan (MELP) exercise provided an opportunity to understand how capacity building development activities have an impact on individuals, institutions and policy for sustainable water resources management. The evaluation of the training programs was carried out through a survey using the evaluation tools. However, it is found that it was slightly difficult to collect the feedback on the workshop from the grassroots level people. However, illiteracy cannot be a barrier to the process of evaluation. IRDP took the voting method to receive feedback from the participants.

The feedback from the respondents reflects that largely the participants found the training relevant to their area of work and to meet their expectations/objectives. They

expressed that the training information/content sufficient to improve their present work performance. They have shared and spread the knowledge with and beyond their institute/ organization to enhance the impact of the training program. The respondents have identified positive changes in water resources management which were contributed by the knowledge that they gained from the training programme.

There is a need for continued participation of women in a training program to strike a gender balance both in participation and perspective. The targeted approach to conduct the training program has been effective; however, the participation of government officials in such training programs would be crucial to enhance ownership. It would ensure the dissemination of information and knowledge to a wider section of the population.

Continual emphasis on Capacity Development Activities is important for awareness generation, knowledge sharing to bring about a paradigm shift towards interdisciplinary research, and well-informed policy decisions and implementation for sustainable water resources management. Through this evaluation exercise, the Networks could identify these issues as their focus area for designing future training programs. It is important to mention here that the inclusion of gender in the training program is crucial, but reporting M/F participants, their opinion and suggestions, Monitoring and Evaluation could also be gender inclusive to capture these nuances from participants, how would opinions differ based on identity.

## 5. 2019 Annual Plan

In 2018 SCaN could not implement all activities listed in the work plan due to lack of funding opportunities and delayed project implementation. Some of them are proposed again in 2019.

| Cap-Net budget summary for all the proposed activities | | | | | |
|---|---|---|---|---|---|
| Sr. No | Activities | Time | Collaborators | Estimated Budget (USD) | Support from Cap-Net (USD) |
| South Asia Activities | | | | | |
| 1 | Capacity Building on Gender and Sectoral Convergence among Water Resources' and Forest Professionals in South Asia | February 2020 | ICIMOD, UNDP Cap-Net, SaciWATERs, New Brunswick Climate Change Research Collaborative (NBCCRC); Association of Registered Professional Foresters (ARPFNB); University of Toronto | 57,000 | 5,000 |

| | | | | | |
|---|---|---|---|---|---|
| | | | Scarborough Campus, Department of Physical and Environmental Science; Université du Québec à Montréal. | | |
| 2 | Regional training Programme: Women in STEM: Training on Open Access Tools for Water Resource Management in the Context of Climate Change | March 2020 | The Small Earth Nepal, SaciWATERs, UNDP Cap-Net | 8775 | 6890 |
| 3 | Regional Workshop on Leadership and Research Methods for Interdisciplinary Water Research | August 2020 | SaciWATERs; PGIA, IDRC | 26311 | 10,000 |
| India Level Activities | | | | | |
| 1 | **Capacity-building programme for Women Farmers on Water and Climate Sustainable Agriculture** | April 2020 | **Society for Women's Action and Training Initiative (SWATI)** and SCaN SaciWATERs. | 3293 | 2,697 |
| 2 | Training program for the junior level engineers and officials of water sector from rural and urban areas of Telangana | September 2020 | International Science Council, SCaN, SaciWATERs | 2800 | 2500 |
| 3 | **Strengthening the Capacity of Stakeholders engaged with National Water Quality Sub Mission** | September 2020 | EU, SaciWATERs, SCaN | 3000 | 2800 |
| | Total | | | **101,179** | **29,887** |

## 6. SCaN Network Budget

# SaciWATERs
# Estimated Budget for SCaN Network Support 2020

| Sl.No. | Budget Item | Proposed Budget | | Requesting for Cap-Net contribution | SaciWATERs Kind contribution |
|---|---|---|---|---|---|
| | | INR | (US$) @ INR 68 | | |
| 1 | Network coordination and administration (Network Manager and ED/ RA time) | 4,80,000 | 7,059 | 6,000 | 1,059 |
| 2 | Communication & promotional material | 24,000 | 353 | 353 | (0) |
| 3 | Office space | 60,000 | 882 | 882 | 0 |
| 4 | Travel | 50,000 | 735 | 735 | 0 |
| 5 | Website maintenance & database management | 60,000 | 882 | 882 | 0 |
| 6 | Monitoring and Evaluation (MELP) | 1,36,000 | 2,000 | 2,000 | - |
| 7 | Promotional activities and network strengthening | 25,000 | 368 | 348 | 20 |
| 8 | Administrative support | 1,20,000 | 1,765 | 800 | 965 |
| **Total** | | **9,55,000** | **14,044** | **12,000** | **2,044** |