Data that development workers and researchers come across is quantitative as well as qualitative in nature. Development workers often end up collecting lots of data, but little effort is made to squeeze useful information from it. Ideally, data analysis shall give insights useful to improve the project interventions and offer unambiguous evidence of project outcomes.

Volumes of data (such as, demography, irrigation, sanitation, crop diversity, land ownership, family incomes etc.) painstakingly collected by NGO workers lands in Microsoft Excel worksheets. 'Percentage' and 'Average' are the only aggregating tools often used by the NGO workers to shred the raw data.

This training course aims to equip the participants with essential techniques of analyzing quantitative as well as qualitative data using simple graphical, deterministic and statistical tools. While utilizing powerful statistical tools in MS-Excel, this course introduces R, which is a free & open source software (FOSS). This training course is ideal for those who use MS-Excel to handle voluminous data, but interested to begin their journey with R software. Simple techniques to analyze qualitative data add further value.

#### Venue

## Karnataka Regional Organisation for Social Service (KROSS)

58/6, 2nd Cross, Da Costa Layout Wheeler Road Extension St. Thomas Town Bengaluru - 560 084, India. Web: www.krossbangalore.org

Phone: 080 - 25496812 / 13 E-mail: krossdir@gmail.com

Location Map:

https://goo.gl/maps/UqmUnxaXKW2

myysb8

(about 1 km from Bangglore Fast

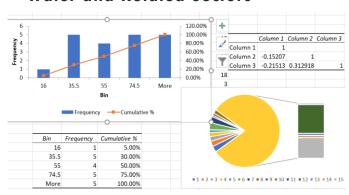
(about 1 km from Bangalore East Railway Station)

Duration: 08.01.2020 (09.30 am) to 11.01.2020 (03.00 pm)

# Data Analysis, Visualization and Interpretation

08-11 Jan 2020 (4 days)

## Basic Skills Course for NGOs in Water and Related Sectors





Water and Livelihoods Foundation Hyderabad, India

#### **About WLF**

Water and Livelihoods Foundation (WLF) is an NGO based in Hyderabad, India. WLF strives towards achieving water security and livelihoods enhancement of poor through community development initiatives, action research & innovations and skill development.

Contributing to the skill building of NGOs, development workers and researchers is one of the major objectives of WLF. Apart from themes such as, water quality, GIS applications, ground water recharge etc., WLF offers skill building modules on data compilation, analysis and interpretation.

Through its skill-building efforts, WLF would like to improve the quality of service delivery by the participants and make positive impact on the life of poor and deserving communities.

#### **RESOURCE PERSONS**

R.V. Ramamohan & Anke Schuermann — have both more than 20 years of experience in the NGO sector.

Ramamohan holds an M.E. in Water Resources Engineering and brings on board professional experience on water, NRM and livelihoods enhancement. His training session will be on quantitative data analysis using Excel and R.

Anke Schuermann is a Nutritional Scientist with a Post-Graduation in Rural Development. She is a trainer on outcome and impact-oriented planning and monitoring with a focus on participatory tools. She will be dealing with qualitative data collection through PRA and analysis.

#### **OBJECTIVES OF THE COURSE**

To equip the participants with essential techniques of data analysis using simple graphical, deterministic and statistical tools.

#### **COURSE CONTENT**

Techniques and methods of handling following types of data encountered frequently by NGO workers:

- 1. Time series data (Ex: Yearly rainfall, monthly ground water level data etc.)
- 2. Analyzing relationships among lumpedparameter data (Ex: rainfall-crop yieldmarket prices-income data of farmers)
- 3. Situation analysis data (Ex: current status of household sanitation; access to potable water supply etc.)
- 4. Geographically-varying data (Ex: child births, infant mortality, ground water quality, soil fertility, distance to health center etc.)
- Qualitative data (Ex: measuring behavioral change, awareness, skill improvement, empowerment, sustainability of CBOs etc.)

Further, the training course differentiates between look-alikes (Ex: Bar Chart and Histogram), delves on common mistakes in sampling of data and dealing with outliers.

The 4 days training is divided into  $2\frac{1}{2}$  days on quantitative data and  $1\frac{1}{2}$  days on qualitative data analysis. Equal emphasis will be given on using MS-Excel and R.

#### **METHODOLOGY**

Both conceptual and practical skills are provided for each of the data type listed under course content. Participants are encouraged to bring their own laptops for practice sessions. R / RStudio Software will be provided by organizers.

## EXPECTED BACKGROUND OF PARTICIPANTS

NGO staff, research scholars and development professionals involved in rural and urban interventions (Agriculture, water conservation, forestry, food security, health, education sectors etc.) with basic knowledge of computers. Participants of earlier batches may attend as a refresher course. Course language will be English.

### COURSE FEE & METHOD OF APPLICATION

- Early bird offer Applied before 30 Nov 2019 → Rs. 3,000 per participant
- Applied after 30 Nov 2019 → Rs.4,500 per participant

Course fee covers shared accommodation (For outstation participants), food and study material. Women professionals and refreshers get 10% concession. Participation certificates will be sent by WLF after completion of the training course.

Signed applications on a plain paper (Name, organization, address, e-mail, mobile no., academic qualifications, professional experience, cheque no. / date.) need to be send along with the cheque (in favour of 'Water and Livelihoods Foundation') to:

Water and Livelihoods Foundation 12-13-451, Street no.1, Tarnaka Secunderabad-500017, Telangana Ph:040 27014467, wlfoundation@outlook.com

Mail any query related to this training course to wlfoundation@outlook.com (or) call Ramamohan-9440194866