# CURRICULUM FOR TEN DAYS RESEARCH METHODOLOGY COURSE / TWO WEEK WORKSHOP ON CAPACITY BUILDING PROGRAMME

(Course Directors may consult this proposed outline while formulating their course structure)

S. No.	Themes to be Covered
1.	Meaning and aspects of research
	<ul> <li>Idea of research;</li> <li>Basic tenets of qualitative research and quantitative research.</li> <li>Relevance of Methodology</li> </ul>
2.	Research Design
	<ul> <li>Selecting topics for research; factors affecting the problem selection;</li> <li>Pure versus applied research;</li> <li>Literature review: International, National;</li> <li>Units of analysis;</li> <li>Concept, variable(s), hypothesis(ses), paradigm;</li> <li>Stages of research;</li> <li>Types of research design with suitable examples</li> </ul>
3.	Field Research
	<ul> <li>Concept and history of fieldwork;</li> <li>Stages of fieldwork – selecting a research setting, gaining access, presenting oneself, becoming invisible, gathering information; □ Field notes – types, coding and analysis; □ Ethnography.</li> <li>Action research: Meaning and application</li> </ul>
4.	<ul> <li>Observation and Case Study</li> <li>Concept of observation, its advantages and disadvantages;</li> <li>Types of observation; field observation – participant and non-participant observation; collection of genealogies; structured and unstructured observation; □</li> <li>Concepts of case, case study, case study method, case approach; □ Types of case study.</li> </ul>
5.	Interview
	<ul> <li>Concept and types of interview – informal, unstructured, semi-structured and structured; intensive interviewing; telephone interview; interviewing children;</li> <li>The interviewer – tasks, selection, and training;</li> <li>Advantages and limitations of interviewing; response effects and the question of accuracy.</li> </ul>
6.	Survey Method and Sampling, Basic Quantitative Analysis
	☐ Data and data sources: secondary data sources, limitations of secondary data; ☐ Need for primary data, collection of primary data

- Concept of survey;
- Construction of questionnaire; wording of questions; open and closed response categories; response category format, Mailed questionnaire; factors affecting mail surveys;
- Sampling techniques.
- Basic Statistics: importance of statistical inquiries and their limitations;
- collection and tabulation of statistical data--- graphical presentation, frequency distribution.
- Measures of central tendency, measures of dispersion

#### 7. **Qualitative and Quantitative Research**

- Similarities and differences between qualitative and quantitative data analysis;
- Methods of qualitative and quantitative data analysis; importance of negative evidence:
- Advanced quantitative techniques: multivariate regression analyses
- limited/qualitative variables and models involving these variables: usages of slope and intercept dummy; linear probability, logit and probit models; basic panel data models
- Hypotheses testing
- Interpretative research: Meaning, significance and application

### 8. Ethics in Social Science Research

- Ethics and the researcher, ethics and the scientific community, ethics and the sponsors of research; ethical issues involving human subjects harm, deception, informed consent, special populations and new inequalities;  $\square$  Privacy, anonymity, and confidentiality, making ethical decisions.
- The politics of research: limits on research, dissemination of research findings;  $\square$  The uses of research: science and society.
- Indian case studies

#### 9. Focus on Qualitative or Quantitative/ Research

#### If the focus of the Programme is on Qualitative Research:

- Qualitative research methods: theoretical perspectives and ethnographic research.
  Principles, guiding ideals and critical evaluation of positivism, postpositivism,
  interpretive approach, and critical perspectives (such as Marxism and radical
  approaches, feminism, post-modernism). Grounding theory: the historical context;
  later development of grounded theory; thick description; limitations and criticisms of
  grounded theory.
- The idea of triangulation and its criticisms; accounting for contradictions; searching and accounting for negative instances.
- Doing qualitative research: ethnographic fieldwork. Doing fieldwork in dangerous situations. Extended case study method; life history method; critical evaluation of case study and life history method; theoretical implications. The process of interviewing; probing and prompting; types of probes; interviewerrespondent relationship; group interviews; focus groups; unobtrusive observation; behaviour trace observation. The methodological cluster of RRA/PRA/PLA. Relationship of survey method with ethnographic method. 

  ☐ Quantification in qualitative research.
- Gender considerations.
- Study of some samples of qualitative research. The issue of reactivity. Writing up qualitative research.

## If the focus of the Programme is on Quantitative Research:

Elementary probability theory and probability distributions and their usage, Large 9. and small sample Tests based on Normal, Students' t and Snedar's F distributions, □2 test of goodness of fit and contingency tables, test-statistic tables and its uses Bi-variate correlation and regression Topics in bi-variate and multivariate regression models: autocorrelation, heteroscedasticity, multicollinearity--- diagnosis, corrections. binary independent variable(s) and applications. 2SLS, instrumental variables models and applications. Panel data Analysis: pooled regression, random effect and fixed effect models and their applications. Limited dependent variable models: LPM, logit and probit models and their applications. Analysis of time series: Lag models, stationarity, forecasting. □ Training in SPSS and other statistical packages 10. Week Two Week Two will be devoted to exposure to academic writing. This will cover writing of research papers, reports and books. It will have 10 sessions over five days and it will be divided into two parts: Part I will be six sessions of lectures/interactive sessions on the main elements of academic writing and publication. Part II will be a "Paper Clinic" of 4 sessions where actual examples of papers/outlines will be taken up for discussion 11. Academic Writing Meaning and types of academic writing Challenges in Academic Writing Papers for Journals Preparation of Reports Writing Books (Difference from PhD thesis) 12. **Ethics in Academic Writing** Meaning and Seriousness of Plagiarism Different Types of Plagiarism How to Prevent Plagiarism Importance of adhering to rules for Referencing/Citation 13. Structure Structure of Paper, Report and Book Differences in structure of each kind of writing 14. Elements of writing

> Introduction, Literature Review, Methods Organising and Presenting an Argument

- Discussion, Conclusions, Abstract (for papers)
- Differences between papers, reports and books in above
- Quantitative: Data presentation, analyses and discussion 

  Analysis of Data and results, discussion and conclusion.

## 15. **Research Proposal**

- Writing a research proposal (difference from papers/books/reports)
- Research Proposal: Main elements
- Identifying and Presentation of Issue(s)/Topic/Problem(s) to be studied
- Quantitative: Presenting a Hypothesis

#### 16. **Publication Process**

- Journals submission, review, revision
- Books manuscript presentation, review, editing,
- Dealing with Rejection
- Importance of Revision (Review Reports, Response sheets)
- Papers/Books: Criteria for selection
- Process: Acceptance to Publication (revision, editing, proofing, printing)
- 17. For the Sessions 11-13 national level resource persons would be preferred. However, a local expert with expertise would also contribute immensely to the discussions. Care should be taken that the resource persons continuously engage with the Paper Clinic (see below) which is the core of the paper writing exercise.. The technique may be decided by the resource persons and this could be discussed in advance with the Director/co director of the course.

## 18. **Paper Clinic**

The idea in the Paper Clinic is to give the participants an opportunity to demonstrate what they have been exposed to in the previous 10 days by working with an actual paper/outline. This is a crucial element of the course and both the course directors and participants must give this module careful attention.

## 19. The Clinic over two days can be organized in either of the following two ways:

- □ Each participant brings a draft paper to the workshop. A select number of papers are discussed in 3-4 groups in the first day in terms of what has been learnt the previous 10 days. On the second day, the writers of the papers which have been discussed come back with suggestions for improvement and this is discussed once again. A few model papers one each from every subject -- may be taken up. Groups may be formed according to disciplines. Five or six groups may be formed. Each resource person may handle two or three groups.
- A second/alternative way is for participants to outline on the first day a possible paper they could write. A select number of these outlines are taken up for discussion on the second day. As in the first option, the groups can be formed according to subject areas.
- The resource person for the introductory session may be chosen locally or from the host institution. Ideally, the Director or the Co-director may take this session.

Discussion and Identification of 3-4 topics for study; topics to cover disciplines represented among participants, each topic to be studied by 7-8 participants (individually). Course director/Resource
persons to guide selection of topics – narrow, tightly defined and of a kind where preliminary research can be done in a week
Research work done in library or field. Field Trip to be organised in a compact manner, survey to be
likewise very focussed; field visit for one day and processing of data the next day
Writing up of article
Discussion in class of one paper selected from each topic (a total of 4 articles to be discussed
in two sessions). During the discussion, other participants could intervene to discuss their
papers as well. The detailed discussion will provide participants an opportunity to learn from
each other and also reflect on what they have absorbed during the first two weeks of the
course.