

Manual 7

How to carry out an Ecological Inventory



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#### Foreword

The 'How to Series of Inclusive Education' is a set of manuals that have emerged from a study undertaken by The Spastics Society Of India, Mumbai in collaboration with UNICEF and supported by the Canadian International Development Agency (CIDA).

The title of the project is *Inclusive Education Practice in Early Childhood*. It is an action research project involving both intervention and research on a large scale covering 6000 families based in the impoverished areas of the Mumbai slums. Six hundred children, both disabled and non disabled, were placed in Demonstration Learning Centres within the community where an enrichment programme and a need based intervention was given over a two year period. The intervention strategies were carefully documented and the progress of the children tracked by external researchers not connected with the intervention team. The aim was to study the mechanism or *intervention* strategies needed to put *children with disabilities* into existing programmes being run by Government and non-Governmental agencies and the barriers that came in the way to accessibility and participation.

From this evidence based research emerged a series of instructional resource material: the 'How to Series of Inclusive Education.' These manuals are relevant for any organisation, or agency, working to address the crucial need of bringing children with any disability into inclusive settings. They recommend a whole community approach to inclusive education, and although the research was carried out in India it can be used anywhere in the world.

### What is an Ecological Inventory?

An Ecological Inventory is an analysis of the environment in which the children live. It is used to design an ecologically valid curriculum.

Ideally, children should be educated in the concepts that they are already aware of. Ecological Inventories are designed by researching:

- The common activities and functional tasks, as well as recreational ones, children in a particular environment usually perform
- The cultural diversity of the community
- Regional, caste and religious differences.

This list is then incorporated into activities in a curriculum. It will be used to decide on equipment, materials, and adaptations to the content of the curriculum. The information in the ecological inventory should be supplemented with a demographic survey to give a full picture of the child's lifestyle.



## Who conducts an ecological inventory?

Home environment



Everyone who is in the community support team can administer the ecological inventory. Anganwadi workers living and working in the community, community site supervisors, and research assistants can collect data.

Interviews are conducted with parents, children, and other family members living in the house.

The approach is ethnographic, using a quasi-anthropological approach with observation technique. The tool for data collection is semi-structured interviews and observations with the help of an observation quide (see appendix).

Lady at work

The people in the community welcomed the interviewers. Most of the elders or male members wanted to know what this survey was all about before they allowed the female members to talk to us. This happened even when we went with a known person.



Home visit

### Where is the ecological inventory conducted?

The ecological inventory is conducted in the community where the anganwadi is situated



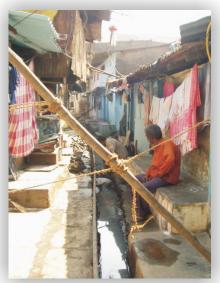
and the children reside. The sample can be 10-15 houses in a community for every 100 children attending the anganwadis. To maintain an unbiased result, a criterion of selection should be decided e.g. every 25th house in a lane.

Child's surroundings

# How to conduct an ecological inventory

After these preliminary preparations, draw up a timetable schedule along with the community workers covering:

- √ Which areas will be visited on which days
- Who will administer the inventory in an area
- How many houses will be covered



How do I go home?

Along with the observation guide, a diary should be maintained for recording unstructured



Cow shed in the community

observations on various visits in the community for other purposes than the administration of the ecological inventory.

When conducting the interviews, the team should visit houses that are willing to participate. The interview should

be conducted inside the house, so that those areas that do not

need questioning like location of kitchen, utensils used or clothes worn by the members, can be observed. This also increases the comfort level of the people who are interviewed. If you visit the houses in pairs, then one person should question while the other documents the answers.



Interview at home

#### Remember

- Approach the households for interviews with a person who knows the community and is known in the community e.g. the anganwadi worker.
- Choose a time that most members are free of housework and have time to spare for you e.g. during mid morning or in the afternoon after lunch.
- Explain the purpose of your interview before you start questioning.
- Show respect to the customs and traditions of that community and particularly the house you are visiting.

We ensured that we left our shoes outside the house we were visiting, as was the custom. We also sat on the floor without any qualms. Our dress was traditional so that we were easily acceptable to the elders in the house.

- Have enough copies of the observation guides when going into the community.
- Be sensitive to the time allotted for the interview. If you do exceed the time, then ask permission for further questioning.

# Appendix 1 Ecological Inventory Observation Guide

1.	Ge	eneral Home Background
	•	The main earning member of the family
	•	The occupation of the earning member
	•	(Observe the physical condition of the room, for example, ventilation light)
	(As	s observed during the time of visit)
2.	Hor	me Environment
		ve the location of the house in details for any kind of environmental hazards nt (both inside as well as outside the house)
	-	
	_	
	-	
	-	
	-	
	•	Are the children told stories?  Yes No
	•	What kind of stories are they told?

# Probe

<ul> <li>Superstitious belief</li> </ul>	efs of the family	
<ul> <li>How strong are the</li> </ul>	se beliefs?	
<ul> <li>How and when are t</li> </ul>	hese beliefs communicated t	to the children?
What are the children's	s daily routines in the	
Morning		
Afternoon		
Evening		
		<del></del>
• The kind of object	rs the child would see in the	ir home
Tubelight	Bulb	Fan
3		
Mixer Grinder	Refrigator	Washing Machine
Television	Tape Recorder	VCR
Radio	Electric Iron	Telephone
The sleening arrange	gements: (Probe the kind of b	nedding used)
• The steeping at Tang	gements. (i i obe the kind of t	reading usea)

Place where the clothes are kept
The clothes that the family members wear
The female members of the house:
The male members of the house:
The children:
Clothes worn on special occasions
• Shoes worn:
Observe the place where the shoes are kept in the house
• Jewellery
Kind of jewellery

	<ul> <li>Place of worship</li> </ul>
	Observe the place of worship
	Observe the materials used while worshipping
	Holy days celebrated in the house and how
	Family Recreation (Probe)  When
	Where
	Who participates
2.	a. Kitchen sub- environment (Observe)
	Observe the location of the kitchen
	Type of food eaten
	For breakfast
	For lunch

For dinner					
Where is t	he source of wa	er for dr	inking and	cooking	
Is it store	d?				 
What abou	t other storage?	)			 
Fuel used	o cook fuel				
b. Toil	et sub - env	ironmei	nt (Obs	erve)	
	et sub - env		·	erve)	
• What c	you use to brus	sh your te	eth?		
<ul><li>What c</li><li>What t</li></ul>	you use to bruse me of the day d	sh your te	eth?		
What to the Elders  The Children	you use to bruse me of the day d	sh your te	eth?		

Where is the toilet? Is it an attached toilet or c	ommon?
Where are the clothes washed and dried?	
What do you use to wash your clothes?	
<ul><li>2. c. Play</li><li>Activities</li></ul>	
• Area	
Toys and aids	
Peer Group	
Types:	<del> </del>
Spontaneous play	
Choice of toys	
Puppets	
Drawing and Painting	
Role playing	
• Dance	
• Games	
<ul> <li>Other play/ movement activities</li> </ul>	

# 3. Geographical Environment (Observe)

•	Location of the House (its distance from the main road)
	The nearest
• Bu	s stop
	s depot
	ilway station
•	Shops that are found in the locality
•	Kind of goods sold in these shops
•	Nearest medical centre (dispensary, clinic, hospital)
•	Where is the treatment done during ailment?
•	Nearest police station
•	Tasks performed during
	Community special events
	Religious functions

	Birthday celebrations
3. a	. Places of Worship
•	Common places of worship in the community
	Yes No
•	How often do you go there?
•	What tasks do you perform there?
	. Animals  Which are the animals you see in your environment?
•	Where are they seen?
3.c.	Bazaar sub-environment
•	Location of the bazaar/local vegetable market (Probe)
•	Does your child accompany you?