PSC Paper No. 21

INTRODUCTION TO THE PSC FILMSTRIP KIT

Prepared in response to various requests
for information on the kit after it was
demonstrated in Lusaka and Nairobi
April - May, 1974

INTRODUCTION TO THE PSC FILMSTRIP KIT

What is the PSC Filmstrip Kit?

It is a kit, which being relatively cheap and simple to operate, is designed to give village extension agents the means to conceive and produce their own filmstrips in the field. It is, therefore, self-contained with all the equipment, materials and spare parts required to operate in rural areas remote from central facilities. So that extension agents can quickly master the technicalities of making a filmstrip, the aim has been to keep the processes and equipment as simple as possible. Most of the adjustments and measurements normally associated with photography have been either eliminated or automated and the number of operations has been reduced as far as possible. The kit is designed to work independently of a darkroom and of AC mains power, so it is possible to develop the filmstrip anywhere in the rural areas. The filmstrip kit produces a black and white filmstrip in the 35 mm full frame format. The equipment in the kit costs about U.S.$250.00 (East African Shs.1,785/-) and fits into one large suitcase-sized box. Expendable materials sufficient to make 25 or 30 filmstrips (depending on their length) cost about U.S.$110.00 (E.A.Shs.714/-).

Why do we need such a kit?

Development support communication materials produced by central governments and international agencies often fail to reach their intended target groups because, either they are inadequately distributed, or they are insufficiently sensitive to local cultural, climatic and economic variations. With careful preparation and enough time, these deficiencies can of course be overcome, but time and money are in short supply in developing countries. Why not give the extension agent, who knows the locality well, the means to produce his own communication support materials? The materials produced may be a little less sophisticated (which is not necessarily a bad thing), but they will be much more sensitive to the local environment, and because the filmstrip pictures will feature local scenes and personalities, they will be more powerful and effective in the village than communication materials produced centrally.

The importance of two-way communication in development projects is often stressed, but so many of the media used in communication support campaigns only allow one-way communication at present. Radio, films, even books and printed posters, all depend to a large degree on expensive equipment and trained personnel. Given scarce resources in most developing countries, these facilities are generally centralised in the capital and other large cities. The extension agents and the rural people do not themselves have access to these sophisticated

...../2

facilities, so while we continue to think in terms of the more expensive media, to talk of two-way communication is just to mouth empty phrases. If we turn our attention to simpler media and give the extension agents the means to communicate vividly with images, we can at least create the possibility of two-way communication.

The final advantage of the filmstrip kit is that it gives the extension agent the chance to develop his own materials in response to his own felt needs. So often he is given communication materials and visual aids which represent what someone else thinks is needed in the area by the extension agent. No one has asked the extension agent himself what he wants and needs. In a recent exciting experiment in the Machakos district of Kenya, extension agents have developed a whole series of teaching materials to be used in the district. (The experiment is described in PSC Paper No. 23.) Already the demand for the materials has far outstripped the expectations of the authors and the available supply.

The Filmstrip Kit is still an Experiment

The filmstrip was chosen for a first experiment in developing and enhancing the resources at the disposal of the rural extension agent, because it is cheaper and more durable than other possible alternatives which rely on the power of images (8 mm film, 35 mm slides). Before we explore the way the filmstrip kit works, it is important to stress that this is still only an experiment. Only a few prototypes are currently available. They are undergoing field trials in India (where the kit was developed) and in Eastern Africa. It is expected that if these trials prove successful, then arrangements will be made for full-scale commercial production. More information is available from the Communications and Information Service of the UNICEF Regional Office in Nairobi, Kenya.

Greg Lanning

June, 1974

How the Filmstrip Kit works*

1. After the filmstrip has been planned, the pictures are taken on a simple 35 mm camera. The camera and flash are fully automatic so that focussing is the only adjustment needed. It is virtually impossible to seriously over-expose or under-expose because the camera shutter locks automatically and prevents a picture being taken under adverse lighting conditions.

2. Then the exposed roll of film is developed in a daylight loading tank, using a packet of chemicals after dissolving in a fixed quantity of water. A one-bath process is used which is independent of bath temperature and developing time, over wide limits.

3. The developed negative is dried and cut into individual frames, which are mounted into cardboard slide mounts. Each frame can thus be handled quite conveniently without touching the film. The filmstrip is then built up by arranging the frames in the desired sequence and numbering them so that they are readily identifiable for printing. Mounted negatives are stored in transparent plastic slide folders which keep dust out.

4. The filmstrip is printed by sequentially photographing each negative. To do this, the camera, copy stand and projector are used. Each negative is projected on a sheet of plain white paper (quarto-size) placed at the focal plane of the copy stand and the projected image is re-photographed. Sub-titles to be photographed along with a negative are written with a felt-tip pen at the appropriate place on the paper screen. The camera's automatic exposure system ensuresacceptably uniform exposures despite possible wide variations in negative density. This makes it possible to print filmstrips from existing or borrowed negatives.

Copies are printed by repeating this process, once per copy. There is no limit to the number of frames in a filmstrip. Two or even three 36-exposure rolls can be printed, developed and later spliced together.

5. The result of photographing the negatives on standard 35 mm (negative) film is a positive image. The film is then developed by exactly the same process as were the original negatives.

* These notes and the equipment list are taken from "Notes on the PSC Prototype Filmstrip Making Kit" by Robert Tyabji, UNICEF PSC, New Delhi, India. This leaflet contains full technical specifications and information on the kit and is available from UNICEF Eastern Africa Regional Office, P.O. Box 44145, Nairobi, Kenya.

NOTES:

A. Titles, cards and close-up shots are taken with the camera attached to the copy stand, which has a fixed field of view and a built-in close-up lens. The flash, bounced off a plastic reflector which attaches to the camera, evenly illuminates the object being photographed. The copy stand can be used either horizontally or vertically.

B. The slide projector is convertible for filmstrip projection and can be connected either to a Jeep, tractor or car battery (12 volts) or through a transformer to the 220-volt AC mains.

FILMSTRIP MAKING KIT - EQUIPMENT

S.No.	Description	Important Specifications	Model	Qty.	Price U.S.$
1	35 mm camera automatic	40 mm f.2.8 fully automatic exposure system. Mfr. CANON, Japan	CANONET-28	1	Combined Kit
2	Electronic flash	Automatic coupling with camera focus. Mfr. CANON, Japan	CANONLITE'D'	1	70.00
3	Copy stand with close-up lens			1	15.00*
4	Flash bracket			1	10.00*
5	Developing tank	Daylight loading, 35 mm Mfr. AGFA, W. Germany	RONDINAX 35U	1	16.00
6	Projector, slide and filmstrip	With 50 m.m. f.4 printing lens, 100 mm f.2.8 projection lens 300 lumen 12 volt 100 watt quartz halogen lamp		1	100.00*
7	Transformer for AC operation	12 volt, 100 watt secondary winding		1	17.00
8	Heavy duty cable	For connection to 12 volt car battery, 20 ft. long, with battery clamps		1	6.00
9	Printing base			1	2.00
10	Clip-board	10" x 11" hardboard with spring clip		1	0.75
11	Negative dispenser	Plastic, to hold 40 slides		1	2.00
12	Scissors	Stainless, 6 inches		1	1.00
13	Instruction manual and instructional filmstrips	Language versions		1 set	10.00
				Total:	$250.00

*Estimated price

FILMSTRIP MAKING KIT - MATERIALS

S.No.	Description	Important Specifications	Estimated qty. required for 25 filmstrips	Unit Price U.S.$	Total Price U.S.$
1	Black and white negative film, bulk loaded, in reusable cassettes	KODAK PLUS-X 125 ASA	72	0.55	40.00
2	Cardboard slide mounts	Self-sealing, Mfr. CANON Japan	1,000	-	30.00
3	Monobath developer		72	0.07	5.00
4	Plastic slide folders	Transparent, 20 slide capecity or more	30	0.40	12.00
5	Ring file for Item 4		1	1.00	1.00
6	White printing paper	Quarto size 60 lb. wt.	250	-	0.75
7	Felt tip pens	Black	3	0.25	0.75
8	Batteries "A" cells	1.5 volts	24	0.13	3.15
9	Film clips		3	-	0.25
10	Projection lamps	Quartz halogen type 7023/100 W. (12 volts)	3	4.00	12.00
11	Miscellaneous items				5.00
				Total:	$110.00

27 November 1973

A FIELD TEST OF THE PSC FILMSTRIP KIT

described by Robert Tyabji
UNICEF, New Delhi

Having ironed out most of the technical bugs in the filmstrip making kit, I felt it was time the kit were taken out into the field and put to the test. I wanted to find out how various extension workers would react to the idea of making their own filmstrips, how they would use the kit, whether they could plan, make and show filmstrips by following the instruction manual, and whether any major changes in the kit or its components are needed.

To do this, I took the kit to two dissimilar testing grounds - the first, to the Social Work and Research Centre, Tilonia, Ajmer District, Rajasthan; and the second, to Gandhigram, Madurai District, Tamil Nadu. A summary of these two experiences follows:

A. TILONIA - 7-17 October 1973

The Social Work and Research Centre, Tilonia, is a voluntary rural development service headed by the energetic Sanjit "Bunker" Roy and staffed by a group of young social workers, agricultural extension workers, a geologist, a hydro-geologist, a cartographer, a doctor, a tractor and drilling rig operating crew, a soil specialist etc. These people live in the rambling Centre itself, which is housed in what used to be a mission hospital and which is now leased from the State Government for a token sum of money.

I reached Tilonia on the afternoon of 7 October (Jeep, courtesy MIO). The next morning ten members of the SWRC's staff got together for a demonstration of the filmstrip kit, which lasted about an hour. Since there was only one instruction manual and two cameras we had to work out a time-sharing schedule, with people working in pairs, two pairs at a time.

Since there is no electricity in Tilonia we had to use a generator to operate the projector to print, and later, to project the filmstrips. Also, there was no running water; the films were developed using buckets of water drawn from a well.

Five filmstrips were made (see list attached). I had very little to do with them - all the credit must go to their makers, with perhaps, a little for the instruction manual.

/...

The most exciting part of the whole exercise for everybody concerned was projecting these filmstrips to the people of Tilonia, on the night of 16 October. About 500 men, women and children crowded into the village square that night. When there was no standing space left, they overflowed on the staircases and roofs of the houses surrounding the square. A white sheet for a screen was stretched between the arches of the panchayat building and the projector was placed atop one of the SWRC jeeps which was parked in the middle of the square.

Mr. Kartar Singh, farmer-turned-social worker, stood on the raised platform of the panchayat building and addressed the crowd, explaining every frame of the five filmstrips that were shown. The reaction from the audience was tremendous, and very noisy (especially when a familiar face was seen on the screen); needless to say, Mr. Singh had a very sore throat by the end of it!

I noticed that the kids invariably read out the titles and sub-titles of the filmstrips in unison, which made it easy for the non-literates in the audience to understand.

B. GANDHIGRAM (5-16 November 1973)

Gandhigram turned out to be an ideal testing ground for the filmstrip making kit because it is a training centre for pre-service and in-service government extension workers who come there from many parts of the country.

I could, in theory, have made the most exhaustive tests at Gandhigram, had I the time, for there are about 25 active institutions involving roughly 3,000 people engaged in various types of extension, developmental, research and teaching work, from whom I was asked to choose!

However, I had only one instruction manual (translated into Tamil by a professor of the International Institute of Tamil Studies, Madras), two cameras and ten days, so I opted for a gram sevak (who was "borrowed" from Athoor Block BDO), a health inspector (from Kannivadi PHC, at the time attending a course at Gandhigram), a balsevika from Karnataka and another from Andhra Pradesh, both at the Gandhigram Family and Child Welfare Training Centre as inservice trainees.

As I had expected, I couldn't communicate very well in English with these people, so I dispensed with the demonstration of the kit and relied on the instruction manual. As it turned out, the

/...

gram sevak was bright, enthusiastic and willing to put in some extra work, so that once he understood the working of the kit, he assumed the role of teacher and guide for the others.

The gram sevak made four filmstrips, each relating to a particular problem area in his village; the health inspector made two, and the balsevikas, one (see list attached).

As at Tilonia, the screenings were the most exciting. The gram sevak screened his filmstrips in his village to about 150 men, women and children, and, like Mr. Kartar Singh of Tilonia, ended up very hoarse. The other screenings, though more sedate, were no less stimulating. The health inspector screened his in the class for his fellow-trainees and the balsevikas did likewise.

I have left the filmstrip kit at Gandigram in the custody of Mr. Thangadorai, Head of the A-V Media Section, GIRH & FP, who is currently using it on an experimental basis in his regular communications course for in-service diploma health education trainees drawn from all over India. Mr. Thangadorai will keep us informed of the progress of the experiment, and expects to return the kit to UNICEF in a month's time.

Observations from the Tilonia and Gandhigram trials

1. The filmstrip kit is technically simple enough for virtually anybody of reasonable intelligence to operate. Filmstrips can be made by following a set of illustrated instructions, after an initial demonstration. No fore-knowledge of photography is necessary. The user quickly becomes familiar with the kit and is usually able to make his third and fourth filmstrip without referring to the manual.

2. The use of titles and sub-titles does not limit a filmstrip to a literate audience. There are usually a lot of children present at a screening, and most of them can read.

3. I admit to a certain amount of initial apprehension when the experiment was started - I was not at all sure that one could, or should, expect quality (of content) of a filmstrip made in the field by a novice. I now think that one can. I found that the filmstrip making kit has a catalytic effect on its users and seems to release from them a lot of imaginative power and creative initiative that may have been lying dormant. The result, incredibly, was that these people in Tilonia and Gandhigram went ahead

without hesitation and produced filmstrips that were not only meaningful and expressive but obviously well thought out and well presented. Ideas flow when the chance arises to express them - the filmstrip making kit aptly demonstrates this.

4. From discussions with various extension staff in and around Gandhigram, I gathered that the village level worker is not usually satisfied with his job, mainly because he feels he lacks prestige, and, through this, lacks credibility in the village community. As a result, it is quite common for people to try to avoid him on his daily rounds.

The filmstrip making kit can be a boon for the under-privileged village worker - I have seen it work miracles for his prestige. He makes a filmstrip, and when he announces a screening, the whole village population turns up for it; he has, probably for the first time in his career, the undivided attention of hundreds of people. He has made the filmstrip himself; he has mastered the techniques of camera and projector; in the community he is now a man to be taken more seriously.

5. Judging from the amount of audience participation that was evident during screenings, the audience relates readily (and volubly) to a filmstrip showing familiar faces and places.

6. The following technical additions to the filmstrip making kit need to be made before a wide-based evaluation programme is undertaken:

a. The printing and projection functions must not depend on AC supply, i.e. the kit should have the (optional) capability of battery operation. A jeep or tractor accumulator would be a convenient source of power.

b. A torch-cell filmstrip viewer would be a very useful tool for the extension worker to use for his daily house visits, when his respondents are limited to three or four people. A viewer should be included in the filmstrip kit.

c. A loud-hailer or megaphone is needed for large audiences. Perhaps this unit could be common to both the filmstrip and the audio-cassette kits?

/...

A tentative action proposal from Gandhigram

From discussions Denzil Phillips and I had with Mr. V. Krishnamurti (Executive Secretary of Gandhigram Institute and Principal of the Gandhigram Rural Institute of Higher Studies), Dr. Pisharoti (Director, GIRH & HP) and Miss Saraswati Devi (Principal, Gandhigram Family & Child Welfare Training Centre), I gathered that they had become extremely interested in the development of grassroots "media kits" and that they were also interested in seeing the somewhat limited filmstrip trial expanded into a larger and more comprehensive experiment.

It became evident that Gandhigram would, in principle, be willing to actively participate in a suitable testing/monitoring/evaluation exercise within their area as part of the overall PSC block level experiment.

A number of ideas were discussed, and a tentative plan (3-5 blocks over a period 9-12 months) was mooted:

(i) Government block supervisory staff (the BDO, Medical Officer, Lady Health Visitor etc) from 3-5 selected blocks around Gandhigram would be given a short orientation course in village level media production and would be shown how the graphics, sound cassette and filmstrip kits are used.

(ii) A series of workshops would be organized, either one in each block, or at Gandhigram itself, where various basic field workers from the selected blocks (say, a gram sevak and sevika, a balsevika, a health or sanitary inspector and an ANM) would be trained in the use of the "media kits".

(iii) During the following 9-12 months, the basic field workers would have access to a "media kit" located in each project block and would be free to use it and produce material for their own use. The block HQ's and PHC's were suggested as suitable places to locate the "kits".

(iv) Gandhigram would monitor the activities of these workers and sample the workers' respondents during the period of the project. It was suggested that monitoring be done at four levels, (1) by means of diaries maintained by the workers themselves; (2) by the block supervisory staff through monthly reports; (3) by Gandhigram in- and pre-service

/...

trainees who make regular visits to the villages in the district as part of their training; and (4) by experts on the staff of Gandhigram and possibly by a UNICEF nominee.

If UNICEF in principle agrees to sponsor such a project and is willing to allocate funds, Mr. Krishnamurti will call a meeting of the Directors, Principals, and other key staff at Gandhigram to decide, with someone from UNICEF, on the best strategy to adopt, to divide responsibilities within Gandhigram, to identify what inputs in terms of money, equipment and personnel would be needed, to keep the State Government informed and to decide how the project should relate to government.

I personally feel that Gandhigram, with its close working relationship with a number of blocks in the district, its direct liaison with block, district and state officials, with its understanding of the field worker and his problems, with its intimate knowledge of rural life, programming, and the process of rural and community development, with its experience in REM techniques, and because of its existing work in village communication and the presence of a competent A-V media facility, would be a competent agency to execute an experiment of the kind envisaged and to prepare an objective and authoritative project report. I think that Gandhigram should be considered by UNICEF as a likely institution for PSC to work through in South India for the block experiment.

Appendix A

The following filmstrips were made at Tilonia (Rajasthan). A copy of each can be seen at PSC.

No.	Made by	Description
1.	Kartar Singh, ex-farmer, now social worker	Agricultural, educational, vocational, cultural and domestic activities of the people of Tilonia. An informational filmstrip for general viewing.
2.	Gangaram, night watchman	How people waste their time and squander money.
3.	Giri Raj, animal husbandry worker	Description of the activities of the SWRC - water resources, drilling operation, crop spraying, medical services, social services etc. To acquaint people in the block with the SWRC.
4.	Miss Manya Jairaman Social Extension Worker	About the children in the neighbourhood.
5.	Miss Shukla, social worker	About the children of Tilonia, their school and their recreational activities.

Filmstrips made by government extension workers at Gandhigram. A copy each is available for projection at PSC.

1.	S. Arumugam, Gram sevak Alamarathupatty	a. A filmstrip for mothers demonstrating that tubectomy operations do not in any way incapacitate the women or reduce their ability to do household chores.
		b. For mothers and children, a filmstrip describing the balwadi and its activities.
		c. For the men of the village; a filmstrip on animal

/...

Appendix A

		husbandry - how the veterinary surgeon performs a uteral cleanse on a cow.
		d. A filmstrip describing government's programme of financial aid for the purchase of cows, buffaloes, goats and chickens.
2.	Inspector (FP) Kannivadi PHC	a. A filmstrip about personal hygiene for basic health trainees.
		b. A filmstrip about the training course for basic health trainees.
3.	Two in-service balsevika trainees from Andhra Pradesh and Karnataka	A filmstrip for future trainees describing the balsevika training course.

CF-RAI-USAA-PD-GEN-2007-000195

Expanded Number **CF-RAI-USAA-PD-GEN-2007-000195**

External ID

Title

"Introduction to the PSC Filmstrip Kit" PSC paper No 21, distributed at Part III (Media in PSC Campaigns) of the International UNICEF/PSC Workshop on Communication for Social Development, held at the University of Zambia, Lusaka, 29 April to 10 May 1974

Date Created / From Date	*Date Registered*	*Date Closed / To Date*
6/1/1974	**6/20/2007 at 12:14 PM**	

Primary Contact

Home Location **CF/RAF/ZW/A118_-1987-000016913 (In Container)**

FI2: Status Certain? **No**

Itm Fd01: In, Out, Internal Rec or Rec Copy

Owner Location **Programme Division, UNICEF NYHQ (3003)**

Current Location/Assignee **Upasana Young since 8/26/2007 at 6:51 PM**

Date Published

FI3: Record Copy? **No**

Record Type **A01 PD-GEN ITEM**

Contained Records

Container **CF/RA/BX/PD/RP/LB/1987/T005: Africa: Social welfare, Nutrition, Sa**

Fd3: Doc Type - Format	*Da1:Date First Published*	*Priority*
	6/22/2007 at 12:05 PM	

Document Details **Record has no document attached.**

Notes

Prepared by Greg Lanning of the UNICEF East Africa Regional Office in Nairobi, in response to requests after the kit was demonstrated in Lusaka and Nairobi, April-May 1974..
Includes "A field test of the PSC Filmstrip kit" described by Robert Tyabji, UNICEF, New Delhi, of his experience with the kit in rural India.

Print Name of Person Submit Image	*Signature of Person Submit*	*Number of images without cover*
Saroja Douglas	Saroja Douglas	14