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PSF Process in India: Achieving Rapid Population Control Using Financial Incentives

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Introduction

This brief report details early results from a rapid population control demonstration project being implemented in the tribal belt of central India. PSF (Project Small Family) process is a newly designed methodology where the responsibility of seeking and adopting family planning methods is shifted to participating women. The reward program is designed to encourage model family norms in a voluntary and verifiable way. Early results are extremely encouraging and are approaching zero population growth in a very fertile group with original TFR (Total Fertility Rate) in excess of 3.0. This group has already achieved a TFR of less than 1.5 in a short duration of nine months.

On-going pilot projects are being funded by Project Small Family, Inc. (PSF), a non-profit organization based in Massachusetts, USA. Local implementation is being done by a Chhindwada MP (India) based non-profit organization named I.D.Y.W.C (Institute for Development of Youth, Women and Children). The results are as supplied by I.D.Y.W.C. There is high degree of confidence in the results because of random field audits conducted by PSF representatives.

PSF process is a radical departure from effort-based population control methodologies being practiced today. It promotes small family norms by providing controlled financial incentives to poor women who must, in exchange, follow a reproductive program as delineated by PSF. The need for this design was prompted by the projected population growth numbers over the next fifty years where the world population is expected to grow to between 9 and 9.5 billion by the year 2050. Since this is a designed process (as opposed to evolved approaches being practiced today), designers had the luxury of looking at existing processes and their drawbacks. In addition, a big effort was made to keep it compliant with existing international treaties for ethical treatment of women while promoting family planning by making it voluntary and non quota-based.

Design Philosophy

PSF process is completely business oriented. The basic statement this design makes is that it is impossible to have a business deal unless both parties feel benefited at the time of deal making. Most of the other population control plans are approaching participants with a good heart and trying to preach small family norms to poor and uneducated families who cannot see any immediate and direct benefit because of their lack of education. These processes have at best demonstrated marginal acceptance by their target audiences.

PSF process on the other hand, utilizes a results-oriented approach. It rewards the results shown. Participants (even the uneducated) can see rewards, and implementers can see results. This simple formula has resulted in one of the best results ever achieved in a voluntary process. And it has done so in a very short period of time.

PSF has eliminated everything which is not directly related to population control. For example, we do not

relate marriages to kids born, so there is no place for marriages or for men in this process. Similarly, family-planning education has been eliminated. We expect to create demand for family-planning education by empowering women to look for this option. If we are able to create demand, private suppliers will fill the void.

The reward money has been arrived at by looking at the Indian national budget and what that country spends per person per month. Our contention is that if a poor prospective mother delays her child by a month, the country should offer that money as a reward, creating a win-win situation. To an implementing nation it is a zero-cost solution to a serious problem, despite its high outlay. There are cheaper processes, but they have very low acceptance. PSF pilot projects have more women on our waiting list than we can serve at current funding levels.

PSF Process

PSF enrolls young women (between the age of 18 and 28), irrespective of their marital status or number of children, from poorer segments of society. They are offered a monthly financial plan until they achieve the age of 33 years. These women are asked to visit a central place every three months, where a female volunteer (trained nurse or doctor) visually identifies if they are pregnant. This is their only contact with PSF during each three month interval. The reward money is directly deposited in their bank accounts every month.

Benefit Program

Initial reward money is equivalent of US\$5 per month. Every quarter they are found not pregnant, they get this money for the next three months. If they complete one year without a break, the monthly reward moneys goes up by 50 cents. Annual increments are applied only if:

- 1) they have no children and are less than 25 years old,
- 2) they have only one child and are under 28 years old, or if
- 3) they have only two children and are under age 33.

In cases where a woman has one child, if she is found to be pregnant or fails to come in for verification, her rewards are stopped for a year. If she already has two children and gets pregnant, she is dropped from the program entirely. If it is her first pregnancy and she is younger than 25 years of age, her monthly amount is reduced by \$1 upon her return to the program, and she does not get any annual increment until she reaches the age of 25. If it is her second pregnancy and she is younger than 28 years of age, her monthly amount is reduced by \$1 upon her return, and she does not get any annual increment until she reaches the age of 28.

Salient Features

PSF is a reward-based voluntary program. Participants can leave the program whenever they want. It is a non-quota system as there is no direct connection between participants and implementers. It empowers women by having their own money in an individual bank account. All reward money is directly deposited into a participating individual's bank account. There is minimal contact with participants (once in three months), resulting in high efficiency. It does not support or oppose any specific family planning method, giving women full freedom to choose. The process design encourages late marriage and child spacing over terminal methods. (Note: A large-scale version of the PSF process has recently been proposed that will use remote monitoring technology in the form of videophone-based call centers. Pregnancy verification will be the task of randomly selected operators. If implemented, this process should result in little corruption as all data created by remote monitoring will be available for review.)

Performance Measurement

Because of our attempt to delay pregnancy, we can only monitor a quarterly drop-out rate (DOR) and try to back-convert DOR to TFR (Total Fertility Rate) achieved. For our calculations, we assume that for a TFR of 3, spread over 12 years (between the ages 18 – 30), we can expect a woman to give birth to a child every four years. This results in 25% of the participants getting pregnant every year, resulting in 6.25% DOR every quarter. The calculated DOR from PSF data reflects the effectiveness of the process. If the DOR falls below 4% for the age group 18-30, it indicates an actual TFR of 2, which essentially means replacement rate.

CAUTION: The calculation of DOR at this stage is not refined. It would be wrong to derive any inference from any DOR calculations using the existing sample of 400 women. We need a larger sample of around 10,000 participants spread out over many locations to derive any meaningful DOR. Also DOR is affected by number of women leaving the program, either because of losing interest or failing to come at the quarterly verification even (even though they may not be pregnant),

Pilot Projects

PSF has been running two pilot projects. The first is in the town of Amarwara. The second is in the town of Lakhnadon. Both are located in the tribal belt region of India in the Chhindwada district of the state of Madhya Pradesh. Each project has a sample size of 200 female participants. We started in May of 2003 with 100 in each project and added 10 more every month for next 10 months. The results presented are up to March 2004 when we conducted our latest quarterly verification event. The projects are staggered by one month, with the second project beginning in June 2003.

Results

Figure 1 shows estimated TFR, back-calculated by dividing DOR by 2. Results at the end of the first quarter show the base-line TFR of this group, as the participants did not have time to react to the reward program. Most of these were probably early stage pregnant at the time of joining. Within six months the sample achieved the replacement rate and dropped below that level by the end of the third quarter. Future results will be listed on our website www.ProjectSmallFamily.org. Zero population growth line at TFR 1.0 is a guesstimate in a high population growth country like India, where annual number of births is approximately three times the number of deaths, and the TFR is about 3.0.

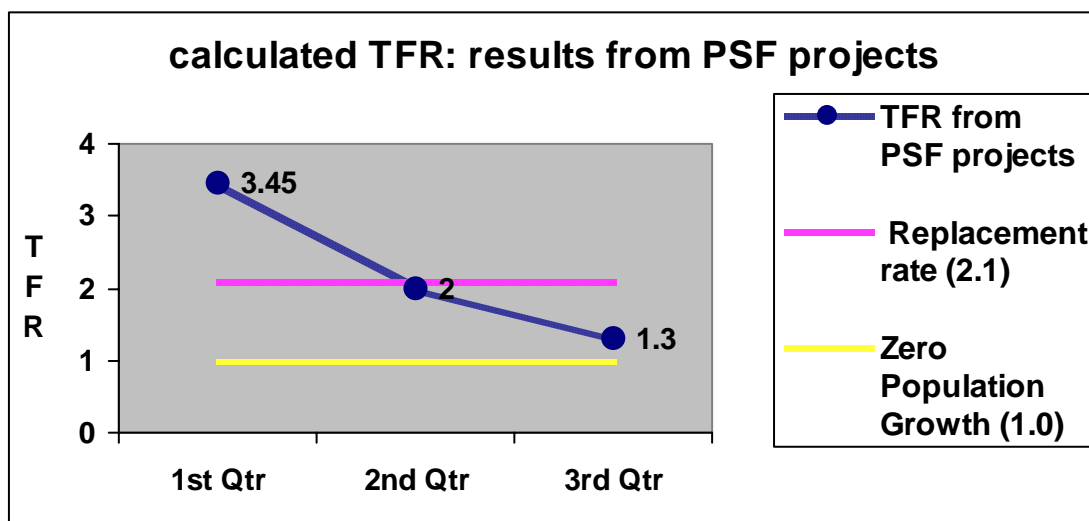


Figure 1. Estimated TFR achieved in pilot projects

Projected TFR calculations are based on the number of women getting pregnant every quarter. Figure 2 gives the breakdown of project results and the DOR number as described in the performance measurement section. Results reporting began in August 2003 when we completed our first quarter.

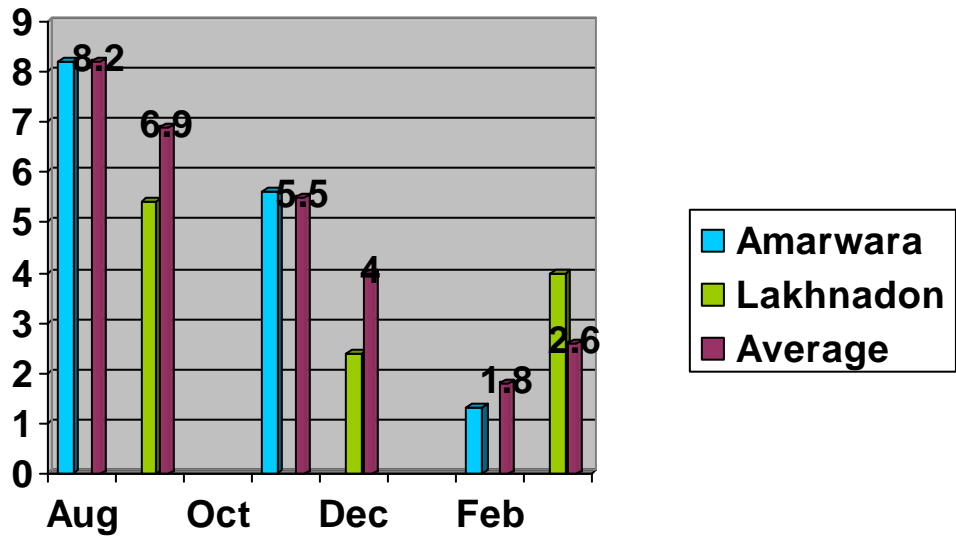


Figure 2. DOR results from existing PSF projects

These results are more than what we initially set out to do. However, due to small sample size, there is a lot of variation from one quarter to the next, and we will need much larger samples over a longer period of time to determine exact performance measures. Table 1 provides a detailed breakdown of data elements in figure 2.

	Amarwara			Lakhnadon			Average		
	Sample size	New Pregnancies	DOR	Sample size	New Pregnancies	DOR	Sample size	New Pregnancies	DOR
Aug 03	97	8	8.2%				97	8	8.2%
Sep 03				92	5	5.43%	189	13	6.87%
Oct 03									
Nov 03	124	7	5.65%				216	12	5.55%
Dec 03				125	3	2.40%	249	10	4.01%
Jan 04									
Feb 04	155	2	1.29%				280	5	1.79%
Mar 04				148	6	4.05%	303	8	2.64%

Table 1. Verification data from PSF pilot projects

Note: Sample size denotes women already in the program for at least three months. Sample size under average columns is the sum of the latest available project results. Sample sizes are increasing with time because we started with 100 women in each project and are taking on ten new participants each month.

Conclusion

PSF pilot projects have demonstrated the ability of uneducated women in poorer segments of society to follow small family norms given proper financial incentives. It has also demonstrated that we do not need a large infrastructure or highly trained staff to implement population control, provided that we recruit the prospective mothers themselves in this effort. The result-oriented nature of this process ensures that there is no money wasted. Money is spent only if results are achieved. The simplicity of the process leads to rapid scalability without a need for specialized training for a large number of field staff. Our recommendation is that, in order to get a true understanding of what can be achieved in a short time through the use of this simple process, the PSF process (and variants of it) should be explored further by organizations better funded than us. We anticipate that the results achieved by other organizations will be similar to ours--irrespective of geographical location--as long as the reward amount is sufficiently compelling for the participating women.