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Force field analysis: applications in PRA

Somesh Kumar

Introduction

Force Field Analysis is a technique to visually identify and analyse forces affecting a problem situation so as to plan a positive change. It has been used in diverse fields ranging from organisational change to self-development. Its visual character, simplicity, suitability for group work and applicability in planning for change makes it a potential tool with wide application in PRA. This article traces the background and origin of Force Field Analysis, enumerates steps for using it and gives examples of its use in PRA.

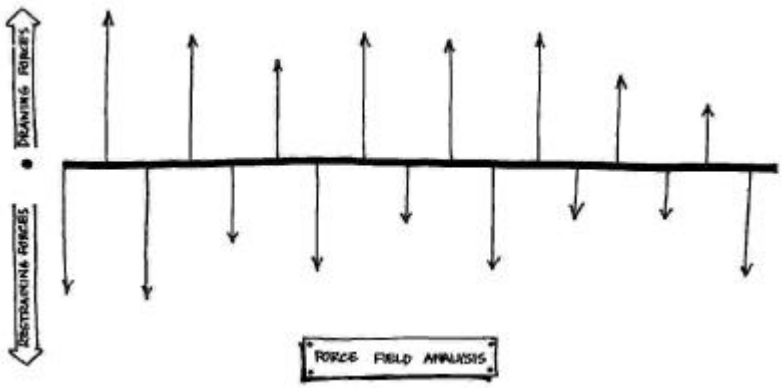
Background

Kurt Lewin is credited with the development of Force Field Analysis (FFA) (Lewin, 1951). According to Lewin, any situation or performance can be viewed as a state of temporary equilibrium. This equilibrium is caused by two sets of opposing forces (see Figure 1):

- those which try to bring change: driving, facilitating or positive forces; and,
- those which try to maintain the *status quo*: restraining, resisting or negative forces.

The length of the arrow in Figure 1 denotes the strength of the force depicted. For every force there need not be an opposing force. In FFA, the forces affecting a problem situation are assigned weights according to their perceived impact on the problem. FFA makes it easy, therefore, to pinpoint the forces which need to be further strengthened and the ones which need to be weakened.

Figure 1. Force field analysis



Source: PLA Notes (1999), Issue 36, pp.17–23, IIED London

Whilst there are some limitations to Lewin's assumption that any problem situation can be viewed as a state of equilibrium, since it is too simplistic to take into account the complexities involved, FFA has proven to be helpful in analysing problems and identifying solutions.

Because it is based on visual depiction, FFA provides people with opportunities to think of forces that are affecting the problem in question. Even problems that look quite vague start becoming clear. The forces are quantified and their strength represented visually. This makes it easier for the participants to think of how to grapple with them in order to bring about change. It becomes obvious that the magnitude of the driving forces has to be increased and that of restraining forces has to be decreased. These decisions are taken jointly in the light of resources available, other constraints etc. Often solutions start to emerge to seemingly insurmountable problems.

FFA in PRA

FFA is most effective in small groups and therefore fits well with the basic tenets of PRA, where the methods are supposed to *'enable local people to share, enhance and analyse their knowledge of life and conditions to plan and act.'* (Chambers, 1992).

Despite being a useful tool to use for facilitating participatory discussion and planning, it has not been widely used as yet (although there is one notable exception – See Montgomery, 1995).

The process

Here I describe the steps which can be taken to use FFA effectively. These steps are suggestions only; they are not prescriptive. The circumstances, location, profile of the participants, time available, problem etc. will determine the exact nature of the process. You are the best judge.

- Write or draw the problem which the group of participants wants to discuss on a sheet of paper. Try to make the problem as quantifiable as possible.
- Keep the sheet of paper with the problem written/depicted on it in front of the participants and ask them to concentrate on the problem. Ask them to visualise the problem situation in a state of temporary equilibrium maintained by two sets of opposing forces - one favouring change (driving forces) and the other opposing them (restraining forces). Using the diagram in Figure 1 can be helpful.
- Ask participants to list one set of forces first followed by the other. Each of these can be written/depicted on small cards. Different colour cards can be used for driving and restraining forces. Clarify that if a force seems to be made of multiple elements, each component should be listed separately as a force. The use of cards is more flexible than simply listing forces on a sheet of paper. They can also create a more participatory discussion, as with cards, writing/drawing can be done by many, and control is not in the hands of one person.
- Keep the sheet of paper with the problem written on it in the centre and draw a line across it. Spread the cards with restraining forces below the line and those with driving forces above the line.
- Ask them to look at the cards and see if they would like to make any changes.
- Next ask the participants to assign weights to each of the forces. They should position each force card at varying distances from the problem-line/present status line in such a way that the distance denotes the strength of the force. The greater the distance, the greater the perceived effect of the force on the problem.
- Check they are satisfied with the diagram, then ask them to discuss how they can change the situation. Which of the driving forces can be reinforced and which restraining forces can be diminished?
- Brainstorming techniques can be used here. Smaller cards preferably of different colours can be used to write down possible interventions for each of the driving/restricting force so as to increase/reduce its magnitude. Each of the possible interventions can be further weighed in light of various factors e.g.

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resources available, time, ideology of the organisation etc. The idea is generally to capitalise on those that would bring greatest change.
- Copy the diagram onto a piece of paper.

If the number of participants is large, one common way is to divide them into smaller groups and then ask them to work on the FFA separately. The findings are later shared amongst the different groups. The frequency method described elsewhere in the article can be used with large number of participants.

FFA also provides ample scope for improvisation (for example, see Figure 3, and the case studies below).

Some practical applications of FFA

Case Study 1: Using FFA to analyse the status of primary education

Bihar State is one of the least developed states in India, a fact which contributes significantly to the numbers of children out of school in the country. Various programmes, such as the Bihar Education Project and District Primary Education Projects, have been started to improve enrolment and retention of children in education and the quality of schooling at primary level. With this in mind, a workshop was organised to design the training curriculum for the education managers. The author facilitated the session and FFA was employed to help identify those forces responsible for the poor state of primary education in the state.

Figure 2 depicts a force–field diagram of primary education in Bihar, created by the group of education managers during the workshop. The participants first prepared a list of forces, both driving and restraining, affecting primary education. They were asked to write the forces on small cards - only one force on each card. Separate colour cards were used for the two different types of forces. Once the cards were written, cards with similar forces were clubbed together and counted. The number of cards denoting the frequency of the force was an indicator of its strength.

The cards were placed at different distances in such a way that the larger the distance, the greater the effect of the force on the status of primary education. Then the group looked at the forces from the point of view of training. They identified driving forces that could be further strengthened by training. Similarly restricting forces that could be weakened by training were also listed. FFA thus, helped in designing a training programme for education managers aimed at improving status of primary education in Bihar.

When the group had previously discussed this issue without using the FFA tool, they could only identify a few causes and very few interventions. However, the use of FFA stimulated discussion and brought new points to light.

FFA can be explained nicely using the analogy of gas balloons and stones (see Figure 3). Balloons represent driving forces, which are acting to bring about a desired change.

Source: PLA Notes (1999), Issue 36, pp.17–23, IIED London

Figure 2. Force field analysis: primary education in Bihar

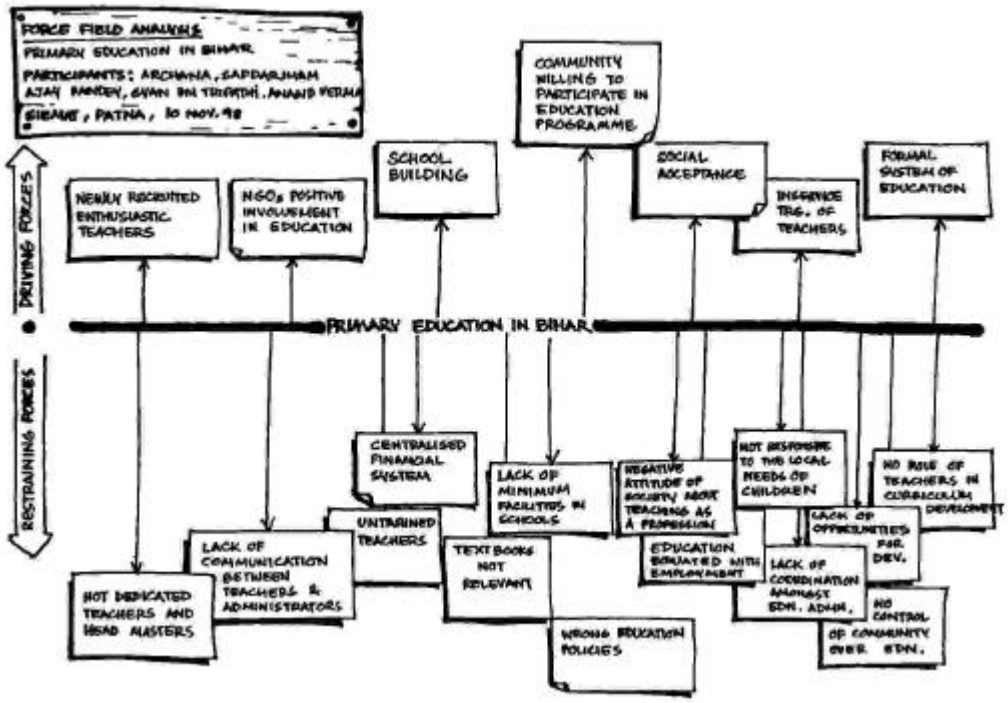
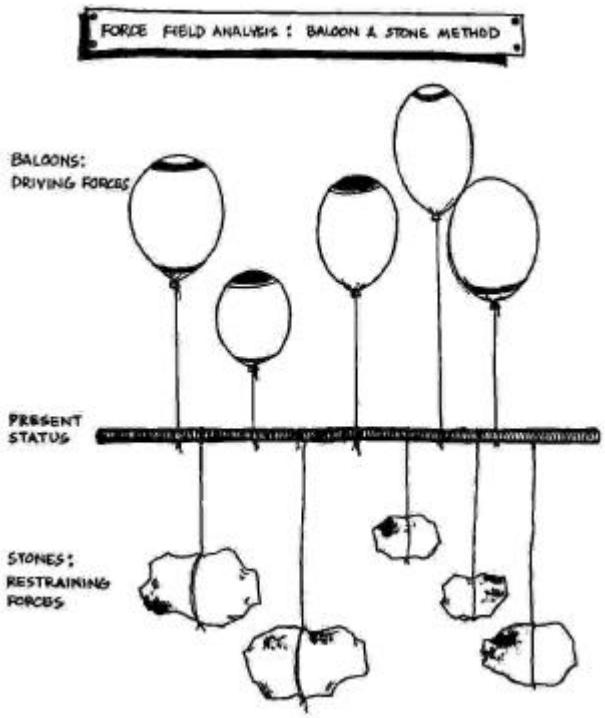


Figure 3. The balloons and stones method



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Stones depict restricting forces thwarting it. The present situation is deemed to be represented by a state of temporary equilibrium as the balloons balance the stones. The length of the strings attached to the balloons and stones can reflect the effect on the problem situation. The larger the string, the stronger the effect. Or else the size of the balloons and stones can denote their relative strengths. Planning for change amounts to identification and finalisation of the process of strengthening of the forces represented by balloons and weakening the forces represented by stones.

Case Study 2: use of scoring techniques with illiterate participants

As part of fieldwork of the 2nd International PRA Thematic Training Workshop, a group of participants visited Gumpuru village of the Ranchi district in Bihar. One of the concerns of the host NGO, Nav Bharat Jagriti Kendra, in the village was how to make the women's group more effective and FFA was used to further this aim. The session was facilitated by Anindo Banerjee of PRAXIS. Figure 4 shows the results of a FFA created by a group of women who were assessing the factors influencing their participation in a local group.

Earlier attempts to get villagers to discuss how to strengthen the women's group had proved difficult. The FFA process really helped the women to identify issues, as well as ways to improve the situation. Lively discussion followed and the participants were able to list possible measures to strengthen the local group.

The women identified the inhibiting and inducing forces, and these were written and drawn on small pieces of cards of two different colours. The cards on inducing forces were placed above this line while those on inhibiting forces were kept below the line. Women then assigned scores to each of the forces by placing seeds on the cards. The number of seeds denoted the extent of the effect of the given force on women's participation in local women's group. The maximum score for a force was 10. The depiction of the problems and use of seeds made it possible for the women who could not read and write to participate meaningfully in the FFA. Seeds also provided ample scope to the participants for modifications.

Case study 3: analysing migration in Orissa

As part of a DFID sponsored participatory poverty profiling in Bolangir, a drought prone district in Western Orissa, India, (see PRAXIS report, 1998) a team of facilitators from PRAXIS used various participatory tools to conduct a study of the poverty profile of the district. Seasonal migration poses a serious problem with the rural poor and a FFA was conducted with a group of villagers to study the factors leading to migration (see Figure 5).

This time, the forces inducing and inhibiting migration have been ranked separately. The number written in the circle represents the rank of the force. Drought and lack of land emerged as the most important factors contributing to migration. Among the forces inhibiting migration were emotional attachment to the to the village and excessive work during migration. The information generated from the FFA has been useful in that it has led to designing a livelihood project, to be implemented by the Government of Orissa, supported by DFID, India.

Source: PLA Notes (1999), Issue 36, pp.17–23, IIED London

Figure 4. Force field analysis showing participation in local women's group: inducing and inhibiting forces

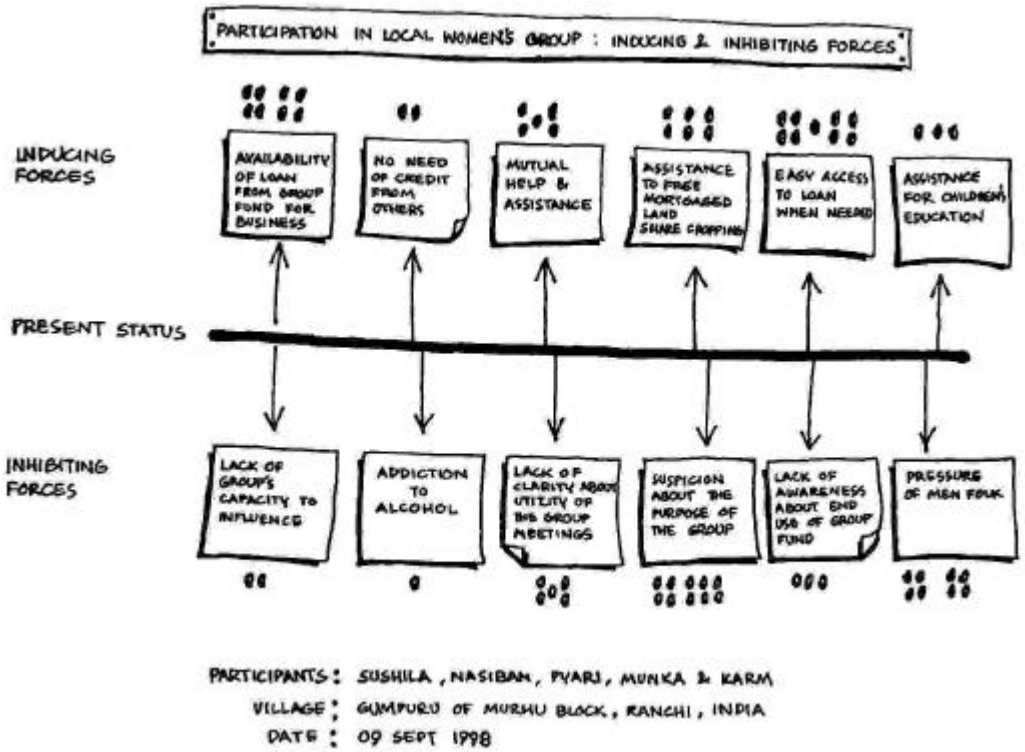
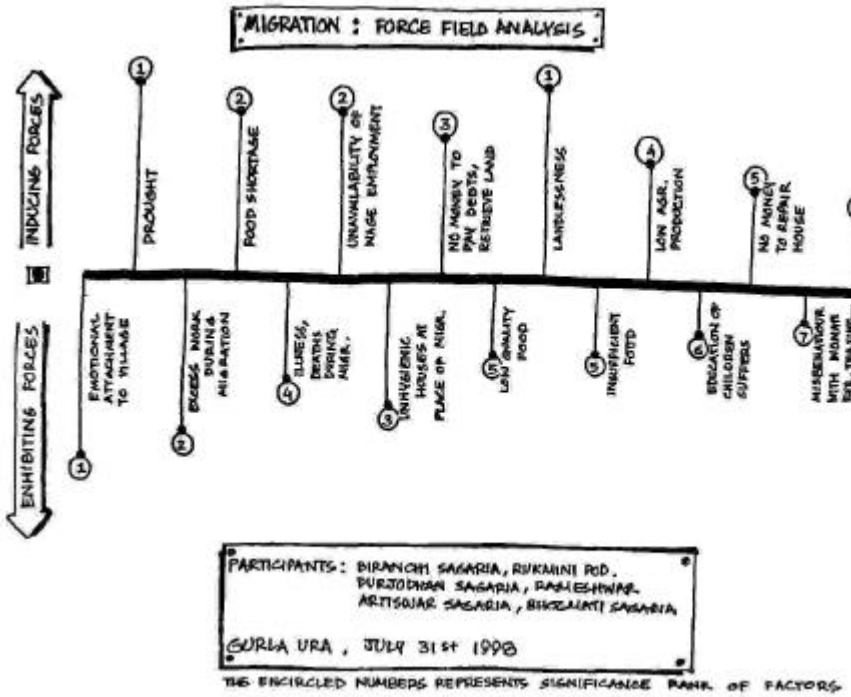


Figure 5. Migration: force field analysis



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· Conclusion

With increasing emphasis on decentralisation and participatory approaches to development, there is a tremendous scope for application of FFA in PRA. At present its potential is only partially utilised.

- **Somesh Kumar,** Director, PRAXIS - Institute of Participatory Practices, 12 Patliputra Colony, Patna 800013, Bihar, India. Email: someshk@actionaidindia.org

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