

RELATIVE IMPORTANCE OF THE FACTORS IN- FLUENCING CO-ORDINATION AMONG PERSONNEL WORKING IN THE INTENSIVE AGRICULTURE DISTRICT PROGRAMME

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INTRODUCTION

THE Intensive Agriculture District Programme (IADP) is the latest extension approach for increasing agricultural production. The agency responsible for the execution of the programme has to deal with many departments, institutions and individuals; it has also to deal with various physical, social, scientific and economic forces. To conduct the programme successfully, it is absolutely essential that different departments, institutions and individuals must play their part judiciously. Even if all of them are assumed to be present, there is still the task of keeping the elements in harmony if there is to be unity of effort towards the chosen end. In fact the success or failure of the programme largely depends upon the levels of co-ordination achieved among the elements.

But it is well known that the levels of co-ordination likely to be achieved are subject to the influence of a number of factors. Some of them affect the organisation from without while the others determine from within the effects that the outward compulsions will have on the level of co-ordination in the organisation. Very few attempts have been made in the past to identify factors with reference to the administrative system engaged in rural development. A careful analysis of such factors which may be affecting co-ordination among different elements in an organisation engaged in rural development would greatly help to achieve the same. Keeping these facts in view, the present investigation was undertaken in Shahabad district of Bihar with two major objectives: (1) to identify the factors that affect co-ordination among the personnel engaged in the package programme; and (2) to find out their relative importance.

METHODOLOGY

SELECTION OF RESPONDENTS

Two categories of respondents were selected for this investigation. The first group consisted of state-, district- and block-level administrators who had at least one year's experience

in the package programme. The total number of respondents in this group was 22. The second group consisted of 22 technical personnel — agricultural extension supervisors, subject-matter specialists and co-operative extension supervisors — posted in the eight randomly selected package blocks of Shahabad district and with at least one year's service in the area of investigation.

It was not considered necessary to obtain views of local farm leaders because seldom, if ever, they had direct access to the intimate facts about the working relationships among the package personnel at block level and above. Also, the pilot study revealed that the local farm leaders had very divergent views about co-ordination and they lacked consistency.

DEVELOPMENT OF INTERVIEW SCHEDULE

Data were collected by personal interview with the help of a structured schedule. The following procedure was adopted for the development of the schedule.

Item collection. The items (factors affecting co-ordination) were collected by content analysis of various books, journals and other literature. This was supplemented by informal interviews with experienced persons in administration. In the pilot study, it was observed that there were variations in the respondents' perception of the definition of 'co-ordination'. Sears' definition of co-ordination as "the task of bringing things together in harmonious relationships to the end that they would function together effectively"¹ was adopted so that the respondents may comprehend its meaning identically.

Item selection. With the help of the sources mentioned in the preceding section, 21 items were collected. Each of the 21 selected items was clearly defined. Thereafter, the list of the items was sent to the 44 selected respondents consisting of administrators and technical officers with experience in extension work. They were asked to scrutinise the items on the following points: (i) to point out ambiguous and irrelevant item; (ii) to indicate synonymous items; and (iii) to include more items, if necessary.

Their responses were analysed and only those items which were agreed upon as the factors affecting co-ordination by at least 80 per cent of the judges were taken up for final study. Fifteen items were thus finally selected. They were: (i) personality — personal attributes of the persons concerned; (ii) concept of

¹ J. B. Sears, *The Nature of the Administrative Process*, McGraw Hill Book Company, 1950, p. 162.

the programme; (iii) knowledge of own duties; (iv) law; (v) social forces; (vi) training; (vii) communication among team-mates; (viii) willingness to work together; (ix) social relationship among persons concerned; (x) faith in the programme; (xi) satisfaction with job; (xii) periodical appraisal of the objectives and procedures; (xiii) existence of planned administrative procedures; (xiv) common agreement on objectives, procedures and responsibilities; and (xv) status difference.

RELATIVE IMPORTANCE OF THE SELECTED FACTORS

In order to judge the relative importance of the 15 selected factors, 'Two-stage ranking' was adopted. In the first stage, the respondents were asked to classify the 15 items in three categories, viz.: (i) very important, (ii) important, (iii) slightly important, on the basis of the perceived importance of the factors. In the second stage, the respondents were asked to rank items grouped in each of the three categories separately from the point of view of their relative importance. To obtain the complete rank-order, the ranked items of all the three categories were arranged in descending order of importance; the most important item was assigned the highest rank value of 15, and the least important was assigned the lowest rank value of 1. To find out the rank value of the items, matrix analysis was done.² The rank values of the selected factors assigned by the two groups of respondents were arranged separately into $N \times N$ matrices. The scale values of the different items were found out for the two groups of respondents by converting the rank values into normalised rank values based upon 'C' scales.³

On the basis of the rank scores, the rank orders of the 15 factors for the two groups of respondents were found out and the amount of similarity of these two rankings was determined by computing coefficient of rank-order correlation. The correlation test gave an idea of both intensity and direction of association of the rankings of the two groups of respondents.

FINDINGS AND DISCUSSION

As discussed earlier, the scale values of the 15 factors along with their ranks for the two groups of respondents, administrators and technical personnel, have been found out and presented in Table 1.

² J. P. Guilford, *Psychometric Method*, McGraw Hill Book Company, 1954, p. 179.

³ J. P. Guilford, *Fundamental Statistics in Psychology and Education*, McGraw Hill Book Company, 1950, pp. 524-528.

TABLE 1: SCALE VALUES AND RANKS OF DIFFERENT FACTORS AS ASSIGNED BY TWO GROUPS OF RESPONDENTS

Factors	Scale values and rank (given in parenthesis) assigned by administrators	Scale values and rank (given in parenthesis) assigned by technical personnel	Pooled scale value
1. Status difference	5.18 (8)	4.91 (8)	5.04
2. Personality i.e. personal attributes of persons concerned	6.18 (4)	7.23 (2)	6.70
3. Concept of the programme possessed by personnel	5.32 (7)	3.82 (11)	4.57
4. Knowledge of duties and how to perform them	4.82 (9)	5.41 (7)	5.11
5. Social forces i.e., traditions customs, moral standards and professional ethics	2.55 (14)	2.14 (15)	2.34
6. Laws—rules, regulations, etc.	1.77 (15)	2.59 (14)	2.18
7. Training—basic, on the job and orientation	4.00 (10)	3.32 (12)	3.66
8. Communication among personnel	3.95 (11)	3.82 (10)	3.90
9. Willingness to work together	7.77 (2)	7.14 (3)	7.45
10. Social relationship among the personnel	5.82 (5)	6.91 (4)	6.36
11. Faith in the programme for the success of which personnel are responsible	7.64 (3)	6.82 (5)	7.23
12. Satisfaction with job	2.77 (13)	4.82 (9)	3.80
13. Periodical appraisal of the objectives, and procedures	3.27 (12)	2.82 (13)	3.04
14. Existence of machinery for co-ordination and planned administrative procedures... ..	5.77 (6)	5.50 (6)	5.64
15. Common agreement on objectives, procedures and responsibilities	8.18 (1)	7.77 (1)	8.00

As could be observed from Table 1, the scale values of the 15 factors for both the groups of respondents varied considerably. This indicates that both administrators and technical personnel were of the opinion that the different factors were not of equal importance.

Generally it may be assumed that if the administrators and technical personnel have reasonable agreement on the relative

importance of the different factors affecting co-ordination, the working relationship between them would be smooth and satisfying. If it is so, it may be useful to analyse the degree of agreement between them on the relative importance of the factors. The rank-order correlation based on the rank values of the factors as assigned by the two groups of respondents came to be + 0.91. This was found to be highly significant. This indicated that though the two groups did not assign the same rank values to the selected factors, their difference was statistically non-significant.

Since the ranking of the factors as assigned by the two groups were highly correlated, it was considered desirable to pool the raw data of both the groups of respondents for matrix analysis so that this could reflect the combined judgment of administrators and technical personnel. Table 2 presents the pooled judgment of administrators and technical personnel regarding the relative importance of the factors. The factors have been presented in the descending order of their scale values.

TABLE 2: SCALE VALUES OF DIFFERENT FACTORS BASED ON POOLED JUDGMENT

Factors	Scale values
1. Common agreement on objectives, procedures and responsibilities	8.00
2. Willingness to work together	7.45
3. Faith in the programme for the success of which personnel are responsible	7.23
4. Personality i.e. personal attributes	6.70
5. Social relationship among the personnel	6.36
6. Existence of machinery for co-ordination and planned administrative procedures	5.64
7. Knowledge of own duties and how to perform them	5.11
8. Status difference	5.04
9. Concept of the programme possessed by personnel	4.57
10. Communication among personnel	3.90
11. Satisfaction with job	3.80
12. Training-basic, on the job and orientation	3.66
13. Periodical appraisal of objectives and procedures	3.04
14. Social forces — traditions, customs, moral standards and professional ethics	2.34
15. Law — rules, regulations, etc.	2.18

As could be seen from Table 2, the scale values of the 15 selected factors varied from 2.18 to 8.00. This indicated that respondents were of the opinion that the selected factors were not equally important in affecting co-ordination. The greater scale value of a factor was indicative of the fact that it affected co-ordination more than those having smaller scale values. As the theoretical ranges of the 'C' scale varied from 1 to 9, following three classes were postulated on the theoretical basis: very important factors (having scale values above 6); important factors (having scale values between 3 to 6); and slightly important factors (having scale values below 3). On the basis of this classification, items 1 to 5 in Table 2 could be considered as very important factors, items 6 to 13 as important, and items 14 and 15 as slightly important factors. The degree of importance of the selected factors presented in Table 2 may not be valid for wide generalisation under different conditions. But this simply indicates that among factors affecting co-ordination, some factors need greater emphasis and attention than the others. It may, however, be mentioned here that during the first stage of the item selection, all the 15 factors were considered to be of considerable importance in affecting co-ordination. Therefore, no factor could be said to be unimportant. The scale values of different factors presented in Table 2 simply indicate that amongst the 15 selected factors affecting co-ordination, some are more important than the others. Therefore, none of the 15 factors could be neglected. The degree of attention needed for each factor may, however, vary according to the degree of its importance represented by the scale value. But the prerequisite for paying attention to the different factors affecting co-ordination would be clear-cut understanding of the factors themselves. Unfortunately, studies on factors affecting co-ordination in development administration are quite meagre. Therefore, the objective of the present study will remain unachieved unless the factors affecting co-ordination are discussed clearly with particular reference to rural development programmes. Accordingly, a brief discussion of the 15 factors under study is presented in the following section.

COMMON AGREEMENT ON OBJECTIVES, PROCEDURES AND RESPONSIBILITIES AND WILLINGNESS TO WORK TOGETHER

Both groups of officers felt that genuine and spontaneous co-ordination among the personnel coming from agriculture, co-operative, minor irrigation, canal irrigation, general administration, supply and other departments and working in one capacity or the other for the success of the package programme

could be best achieved when all the members of the team have an insight into the process and agreement on objectives, procedures and responsibilities of package programme and the persons concerned are willing to work together to achieve the goals. Probably, the judges felt that activities could not be co-ordinated well unless there is agreement on objectives, working procedures and subsequently the disposition to make a personal contribution to an impersonal system.

FAITH IN THE PROGRAMME

The philosophy of co-ordination requires voluntary surrender of control on personal conduct by the members of the team. This situation is greatly facilitated when the members of the team have faith in the vitality and usefulness of the programme. And this faith creates a desire to dedicate oneself and part with some of the rights and privileges in order to achieve harmonious relationship among the members of the team engaged in the programme. This was probably the reason why the judges considered 'faith in the programme' as the third factor in order of importance.

PERSONALITY

Personality is a very important factor affecting co-ordination and has been assigned fourth rank by the judges in this study. Where one is attempting to co-ordinate matters that are purely objective, personality may not greatly help or hinder. On the other hand, in the case of package programme, because of the newness of the concept and lack of adequate guidelines and healthy traditions, often problems of co-ordination arise. In such a situation, personality has much to do with people's responses to what one does. That is to say, co-ordination among the different officials, who usually come from more than one department and have no past experience of working together, could not always be achieved if personalities tend to clash and is greatly facilitated if the relations are harmonious.

SOCIAL RELATIONSHIP AMONG THE PERSONNEL

Personal and social relationship among personnel has much to do with the levels of co-ordination that are likely to be achieved among them. A good level of social relationship helps to create a situation in which each could share responsibilities, take decisions and desirable initiatives without the fear of being misunderstood and misinterpreted. Besides, the nature and level of social relationship existing among personnel in their

private life sets pattern to their day-to-day official relationship. Two persons having hostile attitude towards each other could hardly co-operate with wisdom in the work of the organisation even though other conditions for the same are favourable.

EXISTENCE OF MACHINERY FOR CO-ORDINATION AND PLANNED ADMINISTRATIVE PROCEDURES

The test of real interest in a common objective is the development of a suitable framework for action. Mukerji, while discussing the problems of co-ordination in community development has felt that "in almost every case, a proper machinery for inter-departmental co-ordination has to be built up which will establish good and continuing communication between the functionaries who have to work together".⁴ The existence of suitable machinery and planned administrative procedures thus facilitates flow of information and thereby paves the way for better working relationship. This factor has special importance in package programme as it helps each member of the team to know what part he has to play and who, when and at what places would share responsibilities in taking stock of the situation, arriving at decisions, getting the works done, evaluating the impact and subsequently making modifications, if necessary, in the programme so that the goals could be achieved in the most efficient manner, i.e., with the least expenditure of time, money and labour. Further, in package programme, co-ordination could be easily achieved by linking together the activities of individual members of different departments in such a way that interdependence and interconnection are established. This can be done by having a sound framework and properly planned administrative procedures.

KNOWLEDGE

The factor 'knowledge' stands at the seventh place. Knowledge here refers to the use of facts, reasons and special skill in planning for or adjusting the relationships in the system and also to one's duties and those of the team-mates.

STATUS DIFFERENCES

The status differences among the members of the team have also much to do with the levels of co-ordination likely to be achieved. In the package programme, as the co-ordination is to be achieved among officials of various departments, it is absolutely essential that the status differences among the members

⁴ B. Mukerji, *Community Development in India*, Orient Longmans, Ltd., 1961, p. 123.

of the team working at a particular level should be as little as possible.

The flow of communication, both oral and written, tends to be greater among persons of the same level than what it could be otherwise. And it has been found that greater the flow of communication, the lesser is the chance of misunderstanding cropping up in the organisation.

CONCEPT OF THE PROGRAMME

In trying to use knowledge as a means of producing and maintaining harmony between the functionaries and their functions, it would seem wise to consider not only the facts that the personnel are likely to use, but also the ends, goals and objectives. It is important, therefore, that the personnel should possess an insight into the objectives and philosophy of the programme or; in other words, the conceptual background of the programme for the success of which they are required to co-ordinate their efforts.

COMMUNICATION

Continued maintenance of mutual trust and good will requires free flow of information all round in the organisation. Communication, which was adjudged tenth in order of importance, is not concerned with only flow of information but also calls for intelligibility of the meaning and content of the message both to the sender and the receiver. The underlying aim of communication is a meeting of minds on common issues.

SATISFACTION WITH JOB

The phenomenon of job satisfaction, which has been assigned eleventh place from the top, has, as pointed out by Sinha and Nair,⁵ positive correlation with workers' morale which in turn has positive effect on the willingness of the members of the team to co-ordinate their efforts to help achieve the goals of the organisation. Sinha and Nair further pointed out that satisfaction in work is one of the important criteria of the effectiveness of the organisation and went on to say that "organisation can be evaluated in terms of human satisfaction". A situation of wide and intense dissatisfaction, nursed for "fairly long time usually breaks the morale of the members of the team and disturbs their emotional equilibrium. Such conditions put the workers on defensive

⁵ D. Sinha and R. R. Nair "A Study of Job Satisfaction in Factory Workers" *The Indian Journal of Social Work*, Vol. XXVI, No. 1, p. 1, 1965.

and reduces the chance of co-operation among them. This is because emotion begins to compete with reason for the control of decisions.

TRAINING — BASIC, ON THE JOB AND ORIENTATION

Besides the knowledge of facts and of scientific method that one brings to one's work as a professionally trained person, there is constant need for facts about the cases in hand. Some basic and intimate knowledge of problem must essentially be possessed in advance. But nobody could claim to have all the knowledge relating to his job nor could he anticipate all the problems in advance. As such there is constant need of acquiring knowledge about relatively newer problems or better solutions of the older ones. Advanced training provides indispensable perspective and tool for development.

PERIODICAL APPRAISAL OF OBJECTIVES AND PROCEDURES

As has been discussed earlier, existence of planned administrative procedures and agreement among personnel on the objectives, procedures and responsibilities greatly facilitate achieve co-ordination. Clearly, the more there is agreement and the better the procedures, the fewer will be difficulties. History and common sense, however, tell that in this fast changing world the best plans and schemes of organisation soon become out of tune with the needs. This element of change — change due to shift in emphasis; by force of discovery; by growth; by wars, famines and other disasters goes on continuously and the system has to adjust itself to the changing needs of the community or else it may decay. As long as the programme has to work in the changing rural conditions, it will have to expect its best plans to become less useful in course of time. We plan but soon we must replan; we organise but later reorganise; we lay down procedures and, later, as the conditions change, we must revise them. This should be the nature of the working in a dynamic programme like the package programme.

SOCIAL FORCES

Social forces here refer to customs, conventions, proprieties, traditions, beliefs, moral standards, professional ethics, etc. Existing as beliefs, prejudices or habits, social forces shape our responses to stimuli much as do our minds. We unavoidably respond to people and to situations in terms of these ways of life. These social forces hold powerful sway over us and we make constant use of them in dealing with others. Further, social forces

as traditions, customs etc. are products of evolution. However, in a relatively newer institution like the package programme where there is no tradition, custom, etc., its importance as a cementing and co-ordinating force is very small. This probably is the reason why judges have given it a very low ranking.

LAW — RULES AND REGULATIONS

It may serve the purpose here to think of law, which has been adjudged the least important factor, as the authority by which the system exists. It may also be thought as the will of the people for whom the system operates. As a force, law exists as a set of principles, embodied in statutes, rules, regulations, etc. Law compels attendance, the rule defines how experience is to be used to achieve co-ordination. In these and in many other forms, law is used to define and establish relationships as well as to direct and control the system. The power of law may accomplish its purpose in one case by defining an end to be achieved or form of organisation or a procedure to be used. In another case, it may have to add to this a penalty for non-compliance.

In the ultimate analysis, co-ordination in the package programme is a matter of direct working relationship among relatively independent functions and functionaries. Due to its very nature, it is partly objective and partly personal relationship. Obviously, such collaboration could not be effected by mere rules defining duties or by order commanding co-operation. Social forces like professional ethics, traditions, customs and moral standards may compel to some extent, but it cannot be counted upon to produce genuine co-ordination if the persons concerned happen to dislike one another. Without mutual agreement, faith in the usefulness of the programme, good level of social relationship, existence of planned administrative procedures etc., they will not be able to achieve meaningful co-operation though the absence of these factors may not interfere with their willingness to do so. This explains why the respondents assigned relatively lower positions to such factors as law and social forces.

The above discussion should not lead one to the conclusion that factors are independent of one another or certain factors being less important should be dispensed with and emphasis should be laid on only those that are relatively more important. Keen observation, on the other hand, would show that factors affecting co-ordination probably do not exist wholly in a pure form independent of others. For example, as law grows out of

the customs, common ideas and hopes of the people, so personalities are formed under the influence of both laws and customs of the time. Knowledge of these should increase our capacity to manage the rural development programmes.