CHAPTER FIVE

RURAL NON FARM SECTOR IN NALBARI:
FEATURES, PERFORMANCE AND CONSTRAINTS

In the preceding chapter, along with the background of the field study locations and the RNFS in those locations, some preliminary analysis of the primary data collected has been presented. Besides exploring the relation between size of the village and diversity of RNFS, some basic characteristics of the RNFS entrepreneurs have also been outlined. This has prepared the backdrop for more detailed analysis of the data collected from sample RNFS units in this chapter, which deals with their features, performance and constraints.

5.1. FEATURES OF RNFS ENTERPRISES:

5.1.1. Classification of RNFS Units:

In order to describe the classification of RNFS units, information collected in the filed study regarding nature of labour used for running the sample RNFS units has been utilised. The structure of RNFS units can be broadly classified into two groups- (a) own account enterprises,
run and managed by the family labour and (b) establishments, engaging at least one hired worker.

Out of 109 sample RNFS units 58 units are run and managed by the family labour, which constitute 53.2 per cent of the total. Remaining 51 units constituting 46.8 per cent belong to establishment category.

This clearly indicates predominance of own account enterprises in the RNFS of the district. Further, this signifies that RNFS units in the Nalbari district are by and large still very small in scale.

5.1.2. Age of RNFS Units:

Information regarding year of starting the activity of sample RNFS units recorded in the field study has been used for preparing the age of RNFS units.

Table 5.1 shows clearly age of sample RNFS units in the district.

Table 5.1
Age of RNFS units

<table>
<thead>
<tr>
<th>Age of RNFS Units</th>
<th>Manufacturing &amp; Processing</th>
<th>Trade &amp; Commerce</th>
<th>Manual Transport</th>
<th>Mechanised Transport</th>
<th>Other Services</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>05 (27.78)</td>
<td>30 (52.63)</td>
<td>--</td>
<td>03 (100)</td>
<td>11 (50)</td>
<td>49 (44.95)</td>
</tr>
<tr>
<td>5-10</td>
<td>03 (16.67)</td>
<td>13 (22.81)</td>
<td>06 (66.67)</td>
<td>--</td>
<td>07 (31.82)</td>
<td>29 (26.61)</td>
</tr>
<tr>
<td>10-15</td>
<td>05 (27.78)</td>
<td>08 (14.04)</td>
<td>02 (22.22)</td>
<td>--</td>
<td>01 (4.55)</td>
<td>16 (14.68)</td>
</tr>
<tr>
<td>15-20</td>
<td>05 (27.78)</td>
<td>05 (8.77)</td>
<td>01 (11.11)</td>
<td>--</td>
<td>02 (9.09)</td>
<td>13 (11.93)</td>
</tr>
<tr>
<td>20 and above</td>
<td>--</td>
<td>01 (1.75)</td>
<td>--</td>
<td>--</td>
<td>01 (4.55)</td>
<td>02 (1.83)</td>
</tr>
<tr>
<td>Total</td>
<td>18 (100)</td>
<td>57 (100)</td>
<td>09 (100)</td>
<td>03 (100)</td>
<td>22 (100)</td>
<td>109 (100)</td>
</tr>
</tbody>
</table>

Figures in the brackets indicate percentages
Information presented in table 5.1 shows that 49 RNFS units out of a total of 109 sample units constituting 44.95 per cent of the total came into existence during last 5 years and during last 10 years 71.56 per cent RNFS units came into existence. Further, it is observed that higher the age of RNFS units, lower the number of RNFS entrepreneurs. For example, there are 29 units (26.61) in the age group 5 -10, 16 units (14.68) in the age group 10 -15, 13 units (11.93) in the 15 - 20 age group and only 2 units constituting 1.83 per cent in the 20 and above age group.

This signifies that growth of RNFS in the district is a recent phenomenon.

Among the RNFS units that came into existence during last five years, the mechanised transport sub-sector ranks first followed by trade and commerce, other services and manufacturing and processing categories. All units belonging to mechanised transport have emerged during last five years as compared to 52.63 per cent units of trade and commerce, 50 per cent units of other services and 27.78 per cent of manufacturing and processing sub-sectors of RNFS.

This indicates that mechanised transport is an important sub-sector of RNFS in the district emerging during last five years. Growth of the sector must have facilitated greater mobility of men and materials. This also implies a better integration of markets within the rural economies as well as with outside markets. Of course, one
consequence of growth of this sub-sector is substitution of manual transport by mechanised transport and consequent decay of activities such as, cart-wheel making related to manual transport system.

5.1.3. Linkage of RNFS with the Farm Sector:

Information recorded in the field study relating to flow of output between farm and non-farm sector has been used to ascertain linkages of non-farm sector with the farm sector. The movement of non-farm output to farm as inputs has been regarded as backward linkage and the movement of farm output to non-farm as inputs has been considered as forward linkage. Relevant information reveals that there exist extensive linkages between farm and non-farm sector of the district. Out of 109 sample RNFS units 72.48 per cent bear strong linkages and remaining 27.52 per cent sample units have no linkage with the farm sector. Proportions of sample units having forward and backward linkages constitute 42.20 per cent and 30.28 per cent of total sample units respectively. A total of 18 units of other services category out of 22 sample units and all units belonging to mechanised and manual transport categories have no linkage with the farm sector. In respect of manufacturing and processing only 2 units have no linkage and remaining 16 units have either forward or backward linkage with the farm sector. In the manufacturing and processing sub-sector of RNFS 88.89 per cent sample units have linkage with the farm sector.
as against 81.82 per cent units of trade and commerce having the same linkage.

It signifies that forward linkage of non-farm sector with the farm sector of Nalbari district is more prominent as compared to backward linkage.

As there exists strong linkage between the non-farm and the farm sector of the district, the growth of non-farm sector cannot be considered in isolation from the farm sector. Instead, both of them should grow simultaneously and the growth of one is expected to supplement the growth of the other. This suggests that policies aimed at the RNFS should not be made without consideration of their impact on agriculture, nor should agricultural policies be made in isolation.

5.1.4. Seasonality in the Business of RNFS:

Information received from the sample RNFS units in the field study suggests that there exists clear seasonality in the business of RNFS units in the district. It is observed that 62 sample RNFS units constituting 57 per cent of the total has been affected by seasonal nature of the business. Remaining 47 per cent sample RNFS units are found to be free from any seasonal fluctuations in their business.

Therefore, most of the entrepreneurs engaged in RNFS units having seasonality in their business are required to search for alternative avenues of engagement for generation of income during the slack season.
5.2. FACTORS BEHIND GROWTH OF RNFS:

Information recorded in the field study under the caption "reasons for choice of activities" has been analysed to examine the factors behind the growth of RNFS in Nalbari district. This can answer the research question of the study whether the contemporary growth of RNFS is a distress phenomenon or a positive development.

In absolute terms a total of 57 RNFS units out of 119 sample units constituting 52.29 per cent of the total, came into existence due to operation of push factors. On the other hand, pull factors are found to be responsible for emergence of 30 sample RNFS units constituting 27.52 per cent of the total. Again, 13 sample units constituting 11.93 per cent came up due to impact of push-pull combined factors and remaining 8.26 per cent sample RNFS units emerged under the influence of other factors such as literacy, urbanization etc.

The table 5.2 shows the impact of push, pull and other factors in detail on growth of RNFS in Nalbari district

Table 5.2
Factors behind growth of RNFS in Nalbari district

<table>
<thead>
<tr>
<th>Factors</th>
<th>Manufacturing &amp; Processing</th>
<th>Trade and Commerce</th>
<th>Manual Transport</th>
<th>Mechanised Transport</th>
<th>Other Services</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pull</td>
<td>04 (22.22)</td>
<td>17 (29.82)</td>
<td>--</td>
<td>--</td>
<td>09 (40.91)</td>
<td>30 (27.52)</td>
</tr>
<tr>
<td>Push</td>
<td>08 (44.44)</td>
<td>37 (64.91)</td>
<td>08 (88.89)</td>
<td>02 (66.67)</td>
<td>02 (9.09)</td>
<td>57 (52.29)</td>
</tr>
<tr>
<td>Push &amp; Pull</td>
<td>03 (16.67)</td>
<td>01 (1.75)</td>
<td>--</td>
<td>01 (33.33)</td>
<td>08 (36.36)</td>
<td>13 (11.93)</td>
</tr>
<tr>
<td>Others</td>
<td>03 (16.67)</td>
<td>02 (3.51)</td>
<td>01 (11.11)</td>
<td>--</td>
<td>03 (13.64)</td>
<td>09 (8.26)</td>
</tr>
<tr>
<td>Total</td>
<td>18 (100)</td>
<td>57 (100)</td>
<td>09 (100)</td>
<td>03 (100)</td>
<td>22 (100)</td>
<td>109 (100)</td>
</tr>
</tbody>
</table>

Figures in the brackets indicate percentages
Figures presented in the table 5.2 show that in the manufacturing and processing sub-sector of RNFS a total of 8 units out of 18, constituting 44.44 per cent of the sample units, came into existence due to influence of push factors. Pull factors are found to be responsible for emergence of 22.22 per cent sample RNFS units in this sector followed by 16.67 per cent each because of push-pull combined and other factors.

Similarly, in the trade and commerce sub-sector of RNFS a total 37 sample units constituting 64.91 per cent of the total came into existence due to operation of push factors, 29.82 per cent units came up due to pull factors and push-pull combined factors are responsible for emergence of 1.75 per cent sample units. It is observed that, other factors have induced growth of 3.51 per cent sample units in this sector.
In the growth of manual and mechanical transport sub-sectors of RNFS, push factors are found to be more prominent. Growth of 89.89 per cent sample units of manual transport and 66.67 per cent sample units of mechanised transport are caused by the push factors. On the other hand, push-pull combined factors, induced growth of 33.33 per cent sample RNFS units of mechanised transport category and other factors induced growth of 11.11 per cent sample RNFS units of manual transport category.

Significantly, in respect of growth of other services category of RNFS, pull factors are found to be more prominent as compared to push factors. In this sector 40.91 per cent sample RNFS units came into existence because of pull factors and 9.09 per cent units emerged due to push factors. A total of 8 units, of this sector constituting 36.36 per cent came up due to operation push-pull combined factors and 13.64 per cent sample units came up because of other factors.

It is observed that growth of manual and mechanised transport sub-sectors of RNFS are induced primarily by push factors such as reduced asset base, lack of alternative avenues of employment etc. Push-pull combined factors are found to be responsible for growth of 33.33 per cent sample RNFS units in the mechanised transport sub-sector.

The above analysis indicates that in almost all sub-sectors of RNFS, except other services, growth is distress induced. Of course, in
respect of overall growth of RNFS in the district push factors rank first followed by pull factors, push-pull combined and other factors.

This signifies that RNFS in the Nalbari district is primarily a distress phenomenon.

5.3. PERFORMANCE OF SAMPLE RNFS UNITS:

5.3.1. Economic Performance of RNFS Units:

In order to judge the extent to which the RNFS units are economically successful, several indicators can be looked into. The first variable one may look at is the size of value addition. However, the value addition in the larger units is not directly comparable to those in the smaller units. Hence, value addition to investment ratio has been taken as one of the indicators of economic success. Even this indicator is not strictly comparable across different sectors. For instance, in the manual transport sub-sector, the ratio is an exaggeration of economic success as investment requirement is very small. Therefore, even a relatively small size of absolute value addition can give a large value of the ratio. Hence, in the following analysis, the ratio is compared among units within the sector and not across the sectors.

Those RNFS units are considered highly successful for which the gross value addition to investment ratio is one and above. RNFS units having value of the ratio in between .5 to 1 are considered moderately successful and units belonging to the category of 0 to .5
gross value addition to investment ratios are considered barely successful RNFS units.

Table 5.3. shows gross value addition to investment ratio of various sub-sectors of RNFS other than manual transport category.

Figures presented in the table 5.3. show that gross value addition to investment ratio has been found to be one and above for 12 units in the manufacturing and processing category of RNFS constituting 66.67 per cent of total sample units in the sector. These units are economically highly successful. Similarly 5.56 per cent and 27.78 per cent of total sample RNFS units in this category are moderately and barely successful units respectively.

In the trade and commerce sub-sector a significant proportion of sample units of the sector constituting 71.93 per cent are economically highly successful, 15.79 per cent are moderately successful and remaining 12.28 per cent, barely successful.

In respect of mechanised transport sub-sector 66.67 sample units of the sector are economically highly successful and remaining

<table>
<thead>
<tr>
<th>Sub-sectors</th>
<th>Gross value addition to investment ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 to .5</td>
</tr>
<tr>
<td>Manufacturing &amp; Processing</td>
<td>05 (27.78)</td>
</tr>
<tr>
<td>Trade &amp; Commerce</td>
<td>07 (12.28)</td>
</tr>
<tr>
<td>Mechanised Transport</td>
<td>01 (33.33)</td>
</tr>
<tr>
<td>Other Services</td>
<td>06 (27.27)</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
</tr>
</tbody>
</table>

*Figures in the brackets indicate percentages*
33.33 per cent are moderately successful. Barely successful units are not found at all in this category of RNFS.

The other services category of RNFS constitutes 50 per cent highly successful sample units, 22.73 per cent moderately successful units and 27.27 per cent barely successful units.

Across the sectors 66 per cent sample RNFS units are economically highly successful, 16 per cent units are moderately successful and remaining 18 per cent units are barely successful.

It indicates that majority of RNFS units belonging to manufacturing and processing, trade and commerce and other services categories of Nalbari district are economically highly successful. Barely successful RNFS units are found in all sub sectors except mechanised transport and moderately successful units are more or less present in all RNFS sub-categories of the district.

5.3.2. Entrepreneurial Performance:

To judge the entrepreneurial success of RNFS units the ratio of profits before depreciation to investment has been calculated for units other than manual transport. In this respect too, investment requirement of RNFS units belonging to manual transport category is extremely low for which a relatively small size of profits before depreciation can give a larger value of the ratio. Therefore, the ratio is compared among the units within the sector and not across the sectors.
Using the profits before depreciation to investment ratio an attempt has been made to determine entrepreneurial success in RNFS. Entrepreneurs in each sector having capability to generate greater than 25 per cent profits before depreciation have been regarded as successful entrepreneurs. Those who can generate 10 to 25 per cent profits before depreciation are moderately successful entrepreneurs and 0 to 10 per cent gross profit making entrepreneurs are considered barely successful entrepreneurs.

Based on profits before depreciation to investment ratio the table 5.4 shows number of successful entrepreneurs belonging to different RNFS sub-sectors depending upon the sample findings.

<table>
<thead>
<tr>
<th>Ratio of Profits before depreciation</th>
<th>Manufactur &amp; Processing</th>
<th>Trade &amp; commerce</th>
<th>Mechanised Transport</th>
<th>Other services</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 25%</td>
<td>08 (44.44)</td>
<td>16 (28.07)</td>
<td>-</td>
<td>02 (9.09)</td>
<td>26 (26.00)</td>
</tr>
<tr>
<td>Between 10 to 25%</td>
<td>04 (22.22)</td>
<td>11 (19.30)</td>
<td>03 (100)</td>
<td>04 (18.18)</td>
<td>22 (22.00)</td>
</tr>
<tr>
<td>Between 0 to 10%</td>
<td>06 (33.33)</td>
<td>30 (52.63)</td>
<td>-</td>
<td>16 (72.73)</td>
<td>52 (52.00)</td>
</tr>
<tr>
<td>Negative</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>18.00 (100)</td>
<td>57 (100)</td>
<td>03 (100)</td>
<td>22 (100)</td>
<td>100 (100)</td>
</tr>
</tbody>
</table>

Figures in the brackets indicate percentages

In terms of ratio of profits before depreciation to investment, 4.44 per cent sample RNFS units of manufacturing and processing category
can generate more than 25 per cent gross profits. Therefore, they are considered highly successful entrepreneurs. On the other hand, 22.22 per cent entrepreneurs of this category generate profits before depreciation in between 10 to 25 per cent. These entrepreneurs have been regarded as moderately successful and remaining 33.33 per cent entrepreneurs are barely successful as they can generate profits before depreciation in between 0 to 10 per cent.

In the trade and commerce sub-sector 28.07 per cent entrepreneurs are highly successful, 19.30 per cent moderately successful and a relatively large proportion of entrepreneurs constituting 52.63 per cent belong to the barely successful category.

All entrepreneurs belonging to mechanised transport sub-sector are moderately successful. In other words, all sample RNFS units of this sector can generate profits before depreciation in between 0 to 10 per cent. For mechanised transport sub-sector, the low value of profits before depreciation to investment ratio is somewhat a misleading indicator of entrepreneurial success. Among all RNFS sectors, the mechanised transport category has been the fastest growing sector in the last 5 years. Had the returns in the sector not been encouraging, the sector would not have been growing that fast. In this sector most of the entrepreneurs are usually involved to a great extent in non-entrepreneurial activities of the enterprises. Therefore, returns are more in the form of mix income rather than profits. Hence, a better
indicator of their entrepreneurial success would be professional income to investment ratio. In terms of these ratios the entrepreneurs in this sector also turned out to be successful.

In respect of other services sub-sector of RNFS only 9.09 per cent sample units are highly successful in terms of the ratio of profits before depreciation to investment, 18.18 per cent moderately successful and relatively larger proportion, that is 72.73 per cent entrepreneurs are barely successful.

Proportion of highly successful entrepreneurs is highest in the manufacturing and processing sub-sector of RNFS (44.44), followed by trade and commerce (28.07) and other services (9.09).

In respect of moderately successful entrepreneurs mechanised transport sub-sector ranks first with 100 per cent moderately successful units, followed by manufacturing and processing (22.22), trade and commerce (19.30) and other services (18.18).

Larger proportion of barely successful entrepreneurs is found to be concentrated in the other services sub-sector of RNFS in the district (72.72) followed by trade and commerce (52.63) and manufacturing and processing (33.33).

Among all RNFS sub sectors, except manual transport category, 26 per cent entrepreneurs are highly successful, 22 per cent moderately successful and remaining 52 per cent entrepreneurs are
barely successful. It is important to note that for none of the units the profits before depreciation to investment ratio is negative.

For 26 per cent of the entrepreneurs the ratio is actually above 25 per cent. This means that 26 per cent of RNFS entrepreneurs of the district are highly successful.

As large majority of RNFS entrepreneurs are either moderately or barely successful. Hence there is need for initiating capacity building measures through which quality of entrepreneurs in terms of awareness and managerial skill can be enhanced.

5.4. ORGANISATIONAL STRENGTH AND WEAKNESS:

5.4.1. Organisational Strength and Relevance of Training:

In order to examine the organizational strength of RNFS entrepreneurs' ranks were accorded to various sample units considering their capacity to maintain accounts properly, innovative ideas and awareness about business prospects. Based on the scores accorded by the investigator after careful examination of factors stated above, entrepreneurs were classified into four groups- (i) poor (ii) average (iii) good and (iv) very good.

Those entrepreneurs are considered poor who have scored 9 marks out of 30. Entrepreneurs scoring marks between 9 to 15 are considered average, 15 to 21 are considered good, and 21 to 30 are considered as very good.
It is observed that out of 100 RNFS sample units (excluding manual transport units) only 7.34 per cent turned out to be very good, 16.51 per cent good, 39.45 per cent average and 36.70 per cent entrepreneurs were found to be in the rank of below average.

One of the important reasons of poor organizational strength of the entrepreneurs in terms of accounting practices, innovativeness and awareness about business prospects has been identified as lack of training, because 83 sample RNFS entrepreneurs constituting 76.15 per cent of the total did not receive any formal training in the relevant field. Therefore, significance of training and entrepreneurial strength has been examined by conducting Chi-square test.

The Chi-square test for testing of independence or absence of association between training and organizational strength of the entrepreneurs in terms of accounting practices, innovativeness and awareness about business prospects rejects the null hypothesis of absence of association at 10 per cent level of significance.

This indicates that training has a positive impact on growth of rural non-farm sector as it can enhance organizational strength of RNFS entrepreneurs. It is also needed for enhancing income generation capacity of micro-enterprises within RNFS. This also suggests that there is need for capacity building exercise for enhancing quality and efficiency of persons involved in rural non farm sector.
5.4.2. Expansion and Diversification Plan:

Analysis of information recorded in the field study shows that only 29 entrepreneurs constituting 26.61 per cent of the total have expansion and diversification plans and the rest 73.39 per cent entrepreneurs are satisfied with their existing scale of operation.

Large majority of the sample RNFS units have expressed interest in exploring wider markets. However, only 37.61 per cent have ambitions to explore markets outside the local economy.

But 88.07 per cent believe that there is scope for bigger markets within the local economy itself. Entrepreneurs not looking forward to exploring expanded markets constitute a minority of only about 12 per cent.

These figures signify that a large majority of RNFS entrepreneurs are keen to exploit bigger markets but only 37.61 per cent of them have gathered the confidence to think of exploiting markets even outside the local economy.

5.5. CONSTRAINTS ON GROWTH OF RNFS:

5.5.1. Physical and Marketing Related Constraints:

RNFS entrepreneurs were asked to report the physical and marketing related constraints restricting their activities.
Half of the sample units reported poor road condition as the main physical constraint. For 18.35 per cent of entrepreneurs' power shortage is the main physical constraint.

This shows that the Government's failure in providing road connectivity and power has been physically restricting the growth of RNFS in Nalbari district.

As for marketing, a majority of 41.68 per cent entrepreneurs reported inability of the customers to pay in cash as the main difficulty. For 14.68 per cent of sample RNFS units, the seasonality of the demand for their products is the main marketing related problem. It is, however, heartening to know that a good proportion of 27.52 per cent of entrepreneurs reported no problem in marketing their products.

This indicates that for addressing the marketing related problems of RNFS in the district there is need for injecting fresh purchasing power in the hands of the rural people by launching income-generating projects under the patronage of the Government.

5.5.2. Financial Constraints:

To examine the extent to which the growth of RNFS is aided by support of financial institutions, the shares of institutional credit need in fixed investment and working capital of the sample RNFS units have been calculated.

Based on sample findings, it is observed that a large majority of RNFS units did not receive institutional finance either for starting their
activities or for running their business. For example, in the manufacturing and processing sub-sector of RNFS only 2 units constituting 11.11 per cent of the total sample units in the sector had received institutional finance for meeting the fixed as well as working capital requirements. Other units of the sector largely relied upon own source, friends and relatives or village moneylenders for meeting the financial needs.

Similarly, only 5.26 per cent sample RNFS units in the trade and commerce category received institutional finance for starting the activities and meeting working capital requirements. Remaining 74.24 per cent units did not receive any help from financial institutions.

In respect of mechanised transport 66.66 per cent units received institutional finance for purchasing the vehicle and working capital need has been managed by the entrepreneurs themselves. Remaining 33.33 per cent units of the sector are found to meet financial need from their own sources.

In the manual transport sub-sector, the picture is altogether different. All sample units in this sector depend upon village moneylenders for meeting either fixed or working capital requirement.

In the other services category 15.50 per cent units received institutional credit for meeting the fixed and working capital requirement. Growth of 21.34 per cent units were aided by the support of friends and relatives, 37.37 per cent units have been found to be
managed by the entrepreneurs themselves out of own source and remaining units depended upon village moneylenders.

It indicates that growth of RNFS in the district is not aided by the support of financial institutions except mechanised transport sub-sector. Its growth largely relies upon non-institutional credit floated from different sources like moneylenders, friends and relatives and micro credit in addition to own fund.

5.6. CONCLUSIONS:

The conclusions derived from the analysis presented in this chapter can be summarised in the following points-

- The farm and the non-farm sector of the district are extensively linked with one another. Therefore, growth of one sector is expected to supplement growth of another sector of the district.

- The growth of RNFS in Nalbari district is a recent phenomenon and it is primarily induced by distress factors.

- There is predominance of own account enterprises in the RNFS of Nalbari district.

- A large majority of RNFS units in the district are economically highly successful.
• Training has a positive impact on growth of RNFS in Nalbari district. It is also needed for enhancing capacity of income generation of micro enterprises within RNFS.

• Clear seasonality is observed in the business of RNFS in the district. Therefore, entrepreneurs engaged in the seasonal RNFS units are required to search for alternative avenues of engagement during slack season.

• There is strong positive correlation between size of the village and diversity of rural non-farm activities.

• Growth of RNFS of the district is restricted by various physical, financial and marketing related constraints.