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CONTROL OF TOBACCO CULTIVATION

Action and Reaction Are Equal and Not Opposite

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Action and Reaction Are Equal and Not Opposite

The present paper is part of the study on “Economics of Shifting from Tobacco Cultivation”.

V.B.Annigeri

Now there seems to be no dispute to the fact that consumption of tobacco (either by smoking or chewing) is damaging human health on a global scale. The extremely negative impact of tobacco on health now and in future is the primary reason for giving unqualified support to tobacco control on a worldwide basis. WHO estimates that there are currently 4 million deaths a year attributable to tobacco and it is expected to rise to about 10 million by 2030. Out of this about 70% of the deaths will occur in developing countries. The reason for the control of tobacco also stems from the fact that it is the single greatest cause of non-communicable diseases. It is likely to produce a world pandemic, which has necessitated an early preventive action.

For a student of economics tobacco poses a painful puzzle due to the fact it brings in both gains and losses simultaneously. The economic benefits that the tobacco provides are,

- Income for farmers
- Employment in the tobacco manufacturing industry
- Employment for wholesalers, distributors and retailers
- Taxes raised on tobacco
- Export earnings of tobacco

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Though the cultivation of tobacco is beneficial to the economy the production and ultimate consumption of tobacco leads to many economic losses which may be in the form of,

- Direct health care costs-the cost of treating the diseases related tobacco consumption
- Indirect costs of lost productivity-lost income due to illness and premature death attributable to tobacco
- Non-medical costs i.e. accidental fires and loss of wood and charcoal for curing tobacco

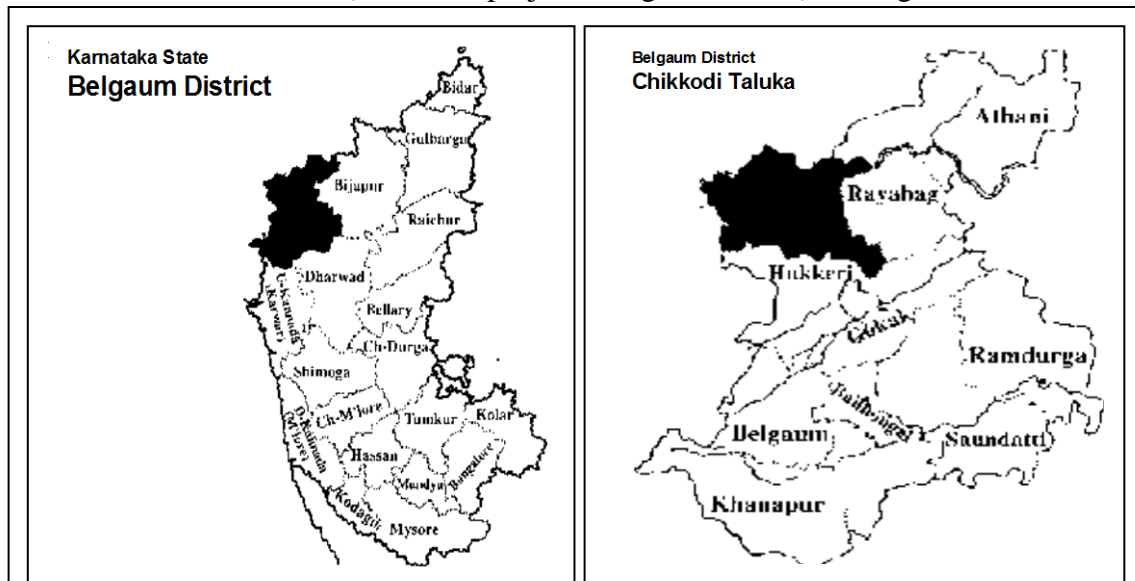
India is the third largest producer and 8th largest exporter of tobacco in the world. The All India Coordinated research project on Tobacco under the auspices of Gujrat Agricultural University estimated that India produces about 550 million kilograms of tobacco in an area of 0.4 million hectares, which accounts for about 0.23 per cent of the total cropped land in the country. Tobacco contributes Rs.3000 crores as excise duty and about Rs.450 crores through foreign exchange to the exchequer. It generates employment to about 30 million people and about 6 million farmers are directly or indirectly involved in its production, pre and post harvest operations as well as processing.

The economic impact of tobacco has been analysed in many countries recently like, Thailand, South Africa, Switzerland, China and Brazil. These experiments have supported studies carried out in United Kingdom, USA and Canada. The message of these studies is that the economic benefits of tobacco are illusory and there are large direct, indirect and intangible costs associated with tobacco that hamper economic development rather than promote it. (World Bank 1999).•

In the ultimate analysis even if the benefits outnumber the losses, the real consideration for reducing the tobacco cultivation as well as consumption are the diseases and suffering and not the economics.

Project Area:

The main thrust of the above cited study is to understand the difficulties of the tobacco cultivators and how best we can overcome these difficulties and make a progress in controlling tobacco cultivation. In so doing the project team thought of initiating a base line survey of tobacco growers in the Nippani belt of Belgaum district in Karnataka State. The below given maps show the location of Belgaum district in Karnataka state and location of Chikkodi taluk (where the project village is located) in Belgaum district.



Belgaum district is in the north corner of Karnatka State. It is frontier district of

the state and is bounded on the southwest by Goa; on the west, northwest and north by the districts of Ratnagiri, Kolhapur and Sangli of Maharashtra State; on the east by

* Curbing the Epidemic : Governments and Economics of Tobacco control. The World Bank, Washington D. C.

Bijapur district and on the south by districts of Dharwad and Uttar Kannad. The landscape of Belgaum district mainly consists of vast stretches of plains studded with solitary hills, most of which are flat topped and are adorned with fortifications. The Krishna, the Ghataprabha and Malaprabha are the principal rivers which flow across the district from west to east. In addition to these three major rivers, the district has several small rivers and streams of considerable importance. Markandeya river , which rises near Bailur in Khanapur taluk, is an important tributary of Ghataprabha. Dudhganga, which originates in the Western Ghats is joined by Vedganga and finally flows into the Krishna river. These two rivers flow in our project area.

Belgaum district receives an average annual rainfall of 748.7 mm. The amount of rainfall decreases, as one moves from west to east. At Khanapur in the west, the average annual rainfall is 1683.6 mm whereas at Raybag (part of the project area) in the east, the average annual rainfall is 509.5 mm. The average number of rainy days too decreases as one moves from west to east. About 68 per cent of the annual rainfall precipitates during the southwest monsoon season, which lasts from June to September. July happens to be the month with the heaviest downpour. In the western portion of the district the rainfall is reliable and seasonal conditions are fairly good and are helpful to agriculturists. Such favourable conditions do not exist in the project area.

The Questionnaire:

This region of the state is one of the prime areas of cultivation of Beedi tobacco, wherein the best quality of tobacco is grown. Three taluks of Belgaum district namely

Chikkodi, Hukkeri and Gokak were chosen for conducting an in-depth survey of cultivators. A detailed questionnaire was developed in order to get the required information about various socio-economic aspects of tobacco cultivators, reasons for cultivating tobacco, their willingness to shift from tobacco cultivation, the incentives needed for such a shift and the like. The below mentioned modules of the questionnaire would highlight the information that we sought from our respondents.

Rationale of the Questionnaire

MODULE	INFORMATION SOUGHT ON
Characteristics of the Household	Age Sex Educational status Marital status Social category of Head of the Household
Family Particulars	Details of the family members regarding Age Sex Marital status Educational status Annual income and details about Consumption of Tobacco.
Operational holding of land	Type of ownership (own leased or other) Total area in Acres, Source of Irrigation (Canal River/Pond Bore-well) Non Irrigated area Type of Soil.
Previous year's agricultural production	Crops grown, <u>Food crops</u> -Jowar, Paddy, Bajra, Ragi, Wheat, Pulses, Others. <u>Non food crops</u> -Tobacco, Sugarcane, Cotton, Soybean, Groundnut, Turmeric, Others. Acres sown Total production Total Value of the Produce Value of the Lost Crop Total Quantity sold Value of the By-products. All this information was taken for Kharif Rabi and Summer seasons separately.
Crop wise and soil type wise irrigation	Availability of irrigation for all the above listed food and non-food crops in different seasons for each category of soil.
Cost of cultivation in the previous year	Cost of labourers(both hired and domestic) Cost of bullocks (both hired and domestic) Cost of irrigation, seeds, fertiliser, manure, pesticides, rent of hired implements. This

	was taken separately for food and non-food crops.
Cost of marketing of agricultural produce	Crop wise Marketing Cost of Packing, Storage, Transportation, Commission to Middlemen etc.,
Previous year's total income of the family from all sources.	Different sources of income identified were, Farm income, Dairy, Poultry, Sheep/goat rearing, Profession, Salaried employment, Remittances from family members residing elsewhere, Daily wages (agricultural and casual) Rentals, and Others.
Total expenditure of the family for the previous year	Expenditure on Food, Clothing & Footwear, Education, Fuel & Firewood, Transport and communication, Pan/tobacco and other intoxicants, Entertainment and recreation etc., were considered.
Asset holdings of the family	Availability of the following items were considered, 1.Consumer durable, Almirah, Television, Refrigerator, Radio, Tape recorder, 2.Transportation vehicles, Bicycle, Motorised two wheeler and Cart. 3.Agricultural implements Tractor, Pumps, Iron plough, 4.Domestic animals Bullocks, Goat/sheep, Buffalo and Cow 5.Other assets, Farm shed and irrigation well

Details about tobacco cultivation	<ul style="list-style-type: none"> • or how many years in the past tobacco was grown by the family • Reasons for not growing other crops in place of tobacco • Problems encountered in the cultivation of tobacco during the previous year • The probable alternate crops for tobacco • Problems of marketing of tobacco vis-à-vis other crops • Place of marketing of tobacco and other crops • Need of the services of middlemen in marketing of the agricultural produce
Details about the loan raised by the family	<ul style="list-style-type: none"> • Type of financial institution giving the credit • Year ,purpose and quantum of the loan • Repayment status of the loan
Receipt of government assistance	Details of the assistance received by the family by the government out of various Integrated Rural Development Schemes
Opinion survey	<ul style="list-style-type: none"> • Past efforts in shifting from tobacco cultivation • Whether presently inclined to shift from tobacco cultivation • Anticipated difficulties in making such a shift • Health hazards of tobacco consumption • Benefits arising from shifting from tobacco cultivation

Empirical Investigation:

Well before initiating the survey in the Nippani belt, the questionnaire was pre tested to know how it is understood by the respondents. The results of the data that was so gathered were presented in the project advisory committee meeting. The meeting proved to be useful in fine tuning the questionnaire. The detailed analysis of the data

gathered by canvassing the questionnaire to **2000 households** is presented in the main study report. These households were spread over **50 villages** in the selected three taluks. Based on the information gathered from the questionnaire the possibility of shifting from tobacco cultivation was considered. The responses of the farmers with regard to shifting helped us to classify the villages into the following categories.

- **villages where shifting was considered possible,**

Examba Khadaklat Hirekudi Karoshi Barwad
Nanadi Gandikoppi Kamaknur Kurni
Akkatangirahal

- **villages where shifting was considered difficult**

Borgaon Chikalwad Bennihalli Jatrath
Nevalihal Yarnal Kothali Shirgaon
Kannur Soundalga Bambalwad Hanchinal
Bedukihal Adi Bhivasi Galatga
Benadi Honnahalli Hitni Ammangi

- **villages where shifting was considered very difficult**

Pattankudi Akkol Kodni Chinchani
Hunnargi Gavan Shiraguppi Shendur
Lakhanapur Rampur Padlihal Mamdapur
Nainglaj Baad Dumratti

- **villages where no tobacco cultivation was found**

Karadaga Mangur Jainapur

Lessons from Field Study:

Before undertaking the intervention programme of making the farmers to shift from tobacco cultivation a careful analysis of the data was made. Such an analysis was useful for getting the clues in designing the intervention package.

The message that was obtained from the field survey data revealed that,

- A significant proportion of the farmers felt that they would give up tobacco cultivation due to the inherent difficulties encountered in its cultivation.
- Tobacco crop is vulnerable to diseases and untimely rains. When the crop is on the threshold of harvesting rains can wash out the whole crop.
- Since tobacco is a labor intensive crop supply of timely labor poses problems for the cultivators.
- Coupled with the problems related to the cultivation of tobacco, the farming community faces yet another challenge with regard to the marketing of the produced tobacco.
- As the marketing of beedi tobacco is not regulated, there are many problems associated with it. For example there is no systematic grading of the produce, the current arbitrary grading by middlemen has proved detrimental to the interests of tobacco cultivators.
- Very few locally operating traders control bulk of the trade. The defacto cartel, which has emerged in the Nippani town, dictates terms to the farmers. These farmers always are at the mercy of the traders due to the fact that the traders are financing most of the agricultural operations, and the clutches of the debt are always squeezing the farming community.
- Added to this the cultivators of tobacco, like other cultivators are less organised and thus they are not able to help themselves by having their own storage facilities to store their produce, which may help them to get favourable price.
- In the event of provision of systematic information about alternative crops, other non-farm activities and provision of necessary inputs for

operationalising this information, the farming community would be desirous to make a gradual shift from the tobacco cultivation to other crops/activities.

Action : Struggle to Sensitize Tobacco Cultivation.

After taking stock of the message that emerged from the field survey, we tried to probe further into the issue of shifting from tobacco cultivation in the project area.

At the outset our task was to select a village for implementing our intervention strategy. With an open mind we started holding discussions in all the above listed villages as well as those villages which were not part of our baseline survey. As a prelude to this we contacted Agricultural Research Center (ARC) based at Nippani, which is a satellite campus of the University of Agricultural Sciences, Dharwad. The focus of this Center is to develop newer varieties of tobacco plants and other issues related to the plant pathology. Thus, it acts as a nerve center of tobacco promotion in the Nippani area. However, the head of this Center was very much appreciative of the noble cause of our study and he provided technical inputs for several aspects of our intervention. The research findings of his center were useful in understanding the weaknesses of the tobacco plant which was a useful input for us in the initial meetings with the farmers to convince them to give up tobacco cultivation.

A Saga of Hopes and Dispair :

The initial meetings were held in a village called **Galatga**, where a group of young progressive farmers evinced interest in participating in our intervention program. As we started holding successive meetings in the village along with agricultural scientists and other social activists we could notice that the village was divided across two groups.

Mounting tension within the village was a pointer to the fact that the rival group may destabilize the process of intervention aimed at shifting from tobacco cultivation. The chances of both the groups participating in the intervention program were quite bleak. In the background of this development we thought of withdrawing from this particular village. Our experiences with regard to this initial phase of intervention are valuable in themselves, in that they bring out how the processes of socioeconomic change are complex and formidable

Next village where we had useful meetings with the villagers was **Akkol**. This village is known for the finest variety of tobacco grown in Nippani area and the growers of tobacco also seemed to be quite organized. Initially they pleaded for the supply of support facilities and necessary inputs in the form of lift irrigation from the nearby river which is about four kilometers away from the village, credit facilities etc.,. According to the villagers; enhanced and assured supply of water would facilitate automatic shift of the farmers towards cultivation of sugarcane, which is supplied to the locally placed sugar factory. Though the argument was quite convincing we were feeling skeptical about their real intentions. This is because in the present day context, inspite of the fact that tobacco is a rain fed crop, farmers may tend to grow tobacco itself with doses of irrigation, as the region receives uncertain and scanty rainfall. From the intense discussions with the farmers, we were apprehensive of the success of interventions, in this direction as suggested by the tobacco farmers. We could sense from the discussions with the farmers that they were interested in just getting some incentives out of our intervention package without any seriousness about shifting from tobacco cultivation. Thus the case of Akkol was also ruled out and we started looking towards some other village where we could make headway with regard to the implementation of intervention package.

Lessons from failure of Initial Action:

These meetings with the villagers were helpful in some respects, and we were able to understand many issues related to the empirical aspects of tobacco cultivation. In the first instance, **we could learn from the farmers that it is not pure economics, which is the guiding factor for the cultivation of tobacco.** Farming community keeps cultivating tobacco in the Nippani area just because the habit has descended from their ancestors. They consider tobacco cultivation as a way of life and logical reasoning seems to be having no impact in making the decision about tobacco sowing. **There is also a strong feeling in the farming community (it is just a belief which is not substantiated by scientific findings) that rotation of tobacco crop once in three years would increase the soil fertility.**

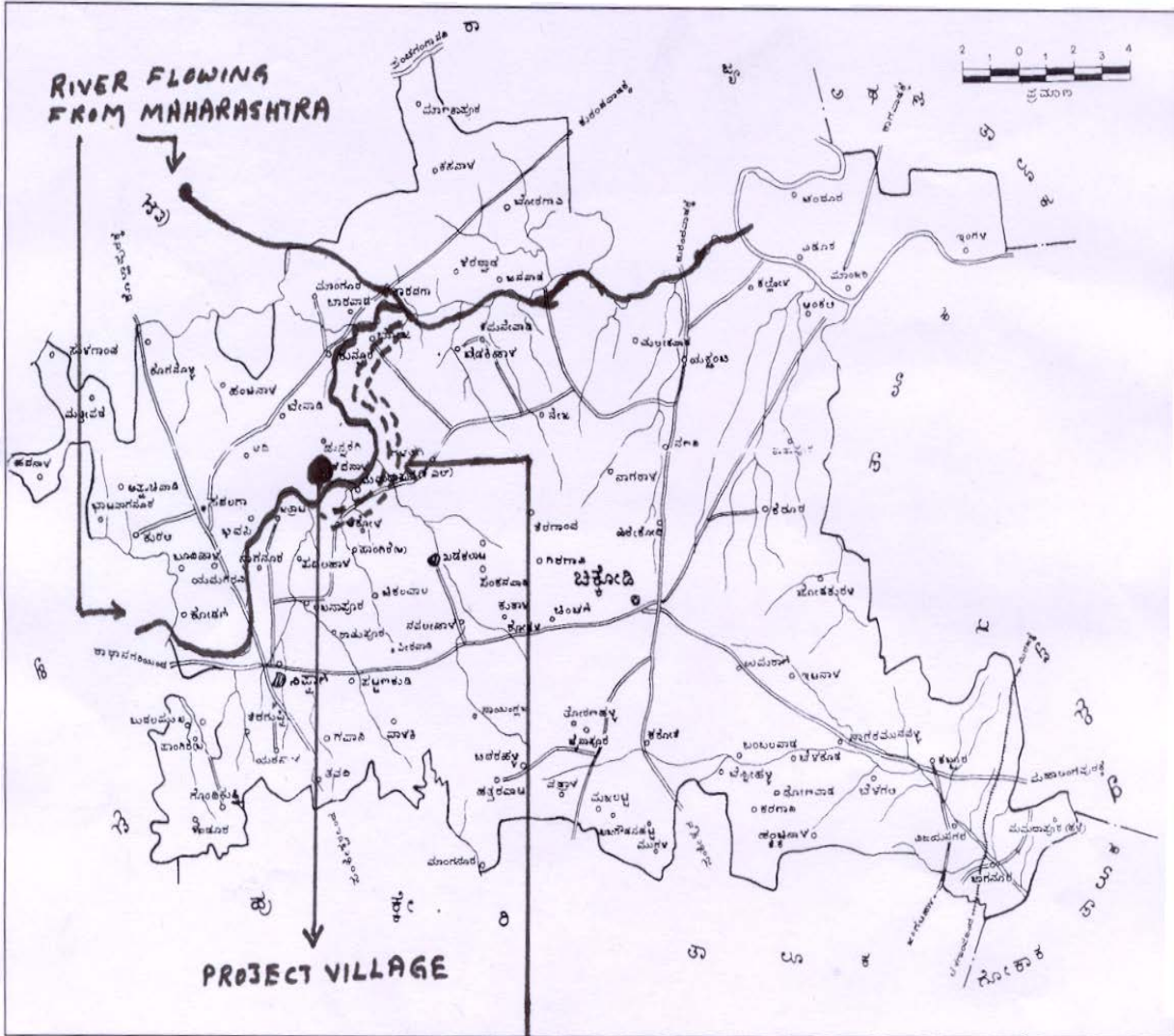
Whenever the initial phase of monsoon rains fail or there is an expectation of unfavourable price for other crops, farmers would be prompted to go in for tobacco cultivation.

Inter-state River Flow and Shifting Proposals:

The discussions with the farmers also revealed that flow of rivers across the state have a bearing on the cultivation of tobacco in this particular area.

The Vedadaganga river which flows around most of these villages should have been a boon for tobacco cultivators since it is the source of irrigation through which they can shift to other crops. In this context one important aspect which needs elaboration is that one more river named Doodhganga, which flows in from the neighboring State of Maharashtra has been the source of concern for inter-state distribution of water resources.

A dam is constructed on this river in Maharashtra and the water is released according to the needs of the farming community of that state. The river flows into Karnataka for some kilometers and again enters Maharashtra. Vedaganga river, which also flows in the same fashion finally, joins Doodhganga river and flows into Maharashtra. The water from the reservoir of Doodhganga which is released through a canal from the Maharashtra Irrigation department during summer season no doubt caters to the needs of some of the villages of Karnataka before finally serving the needs of villages of Maharashtra. The water so released serves as backwater for the river basin of Vedaganga river which helps few villages of Karnataka. The quantum of such water depends largely on the water release by the Maharashtra state. In case very little water is released, the backwater situation may not arise and the farmers of Karnataka may not get water for their standing crop. The below mentioned map explains the position of the project village in Chikkodi taluk and the rivers flowing across the taluka.



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 PORTION OF VEDGANGA RIVER ACTING AS
 BACKWATER AS A RESULT OF RELEASE
 OF WATER BY MAHARASHTRA STATE

In this background our effort to identify a more receptive village in the region was on. Our discussions with the farmers of Sidnal village were quite fruitful. In the initial meeting itself they were quite interested in participating in our project. They also explained to us about the inter state water sharing problems faced by the farmers in this region of Karnataka State and other related matters in connection with the control of tobacco cultivation. Based on these discussions we were inclined to select this as the village for our intervention experiment. One more reason for this was that the progressive farmer of that village who had left tobacco cultivation for economic reasons as well as health hazards of tobacco came forward to strengthen our efforts to shift from tobacco cultivation. To chalk-out the intervention package we called a meeting of select farmers, motivators, agricultural scientists, bankers and agricultural insurance functionaries, social activists and artists.

With regard to the inter state sharing of water resources the experiences of the project team needs a mention here. The farmers of the village mentioned to us about the fact that the Karnataka government is required to pay Rs.1 crore to the Maharashtra State for ensuring sustained water supply to the Vedaganga River. As this payment was not made during the intervention period there was acute water shortage for the farmers of Karnataka. CMDR took up this issue and the representation, which was made by about 100 farmers regarding the release of water to Karnataka was brought to the notice of Planning Commission. In this regard as the water sharing mechanisms are the fallout of Central Water Commissions' Bachawat Awards, the issue needs a closer examination. A political intervention might help.

- Farmers were invited to present the difficulties involved in the cultivation and marketing of tobacco,
- Agricultural scientists were to present the bio-tech aspects of tobacco cultivation, wherein the emphasis was placed on weaknesses of tobacco crop and possible alternative crops suitable to the weather and soil conditions of the project village,

- Senior bank officials of Malaprabha Grameena Bank and Resident in-charge of the NABARD (National Bank for Agriculture and Rural development) were invited to explore the role of banks in participating in this project,
- Representatives from insurance companies were invited to explain the range of insurance policies available to the farmers for protecting their crops as well as other agricultural assets and animals,
- Social activists and motivators were requested to design the programmes to bring a change against tobacco in the mind-set of the farmers for alternative crops or other alternative activities.

In this context two video films were produced by CMDR. The first one was on health hazards of tobacco consumption, which was an educative documentary highlighting the ill effects of chewing tobacco and Gutkha-an addictive powder of beetlenuts and tobacco with other attractive ingredients.. The second one was the outcome of the skit written by the Project Leader Dr.P.R. Panchamukhi, focussing on the cultivators of tobacco. Various anti tobacco slogans were also written,for being distributed to the school children and the general public not only in the project area but in other places as well.

The deliberations of the meetings were quite useful and they paved the way for meaningfully evolving the intervention package. Scientists from ARC Nippai and University of Agricultural Sciences, Dharwad presented their research findings related to the cost and benefits of tobacco cultivation, the vulnerable aspects of tobacco crop, alternative use of tobacco crop etc., Some of their findings actually supplemented the results of our detailed field survey. In the opinion of the scientists, if the farmers prefer to grow tobacco the harmful effects of tobacco can be eliminated for the benefit of the society as whole. This can be made possible by not allowing the crop to mature fully and instead it has to be harvested before it is fully ripe. The experiments have shown that before tobacco is ripe it contains good amount of proteins, which can be used fruitfully for preparations of medicines and nutritive foods etc, Though the suggestion was quite

useful and worth trying we could not pursue the idea due to financial and time constraints. Another useful information was in relation to the alternative crops, which can be grown based on soil and weather conditions of the area. Though farmers were aware of some of the crops, the newer varieties of such crops as elaborated by the scientists was a crucial information to them. The first best alternative suggested was Sugar cane. But in view of the shortage of assured year round irrigation facility, the farmers as well as research team felt that this option can be considered only when some measures are taken to help the farmers with regard to the lift irrigation system. This is possible only when there is an assured water supply from across the Maharashtra State. Other alternative crops suggested were,

- Soybean,
- Groundnut,
- Onion and
- Sunflower.

Our field survey analysis of responses of 2000 farm households had already reached similar conclusion about such alternative crops to tobacco.

Bank officials were very much appreciative of the noble cause of the project. They assured the project team as well as farmers that as agriculture happens to be the priority sector for the lending operations of the banks they would come forward to assist the farmers in shifting from tobacco cultivation. Apart from the crop loan, which is usually given for pre sowing financial requirements of the farmers, the banks would also assist in undertaking non-farm activities. Such activities can be carried on in lieu of tobacco cultivation, which sustains income-earning opportunities for the farmers. Representatives of the insurance companies explained to the farmers about various crop

insurance schemes available to the farming community. Along with this the schemes which cover other assets and implements and also the cost involved therein were discussed in detail.

Social activists and artists discussed about educating the rural community about giving up tobacco cultivation and consumption. Street play, AV Shows, Posters and awareness camps were planned. A meeting with a highly influential religious leader of the region was held to request him to highlight the importance of shifting from tobacco cultivation in his discourses in the region.

The following members attended the meeting,

Dr. K.R.Madi, Member, Project Advisory Committee
Mr. R.V.Swamy, Director, NABARD, Dharwad
Mr. Anantakrishna, Chairman,
Malaprabha Grameena Bank, Dharwad
Dr. G.K.Hiremath, Professor, University of
Agricultural Sciences, Dharwad
Mr. G.S.Kalgade, Progressive Farmer
Mr. S.N.Yeligar, Progressive Farmer,
Select Farmers from the Project Area
Other Social Activists and Artists

In all, about 25 such meetings were held prior to and during the intervention. They were attended by shifters, motivators, bankers and social activists

Members of research team,

Dr. P.R.Panchamukhi, Project Leader
Dr. S. Debi
Mr. V.B.Annigeri
Mrs. N.S.Nayak

In the light of the discussion of this meeting we progressed further with the task of facilitating of shift from tobacco cultivation. **The village of Sidnal where the environment for initiating the intervention package was found to be conducive became our project village.** Our immediate task was to hold one more meeting with villagers to chalk about the further course of action. Thus a meeting on a much bigger scale was held in the village itself where about 30 to 40 farmers attended the meeting. The meeting was held in the house of the progressive farmer, a non-grower of tobacco who was also co-opted as one of the motivators in the Project. Earlier to this, professors and students were tried as motivators. A non-farming activist was tried as a motivator. Finally a farmer has been tried as a motivator – which has proved somewhat more encouraging. **This also suggests that the agents of sensitization should be drawn from within the people towards whom intervention is targeted.**

Therefore, **endogenization of the reform process is needed for effective change.** Involvement of farmers in evolving intervention strategy, making them responsible in the process of implementation of the strategy, introduction of mid-course correctives, etc is important. **The NGOs have to be only facilitators of change rather than ‘imposers’ of change.**

In response to the oral notice spread out in the village the farmers gathered in the motivators’ house. At the outset we explained the nature and objective of the project to them. The idea was effective in arousing the interest among them and they started slowly unfolding their mind about shifting from tobacco cultivation. **The common mood was such that the farmers were really fed up of the tobacco cultivation.** They expressed their concern about the vulnerability of the crop to the vagaries of nature as well as problems associated with its marketing. Coupled with this the labour intensiveness of the crop has made farmers to spend most of their as well as hired labourers’ time on the field at the cost of looking after other crops and other activities. They voluntarily agreed to participate in our project. A scientist from ARC Nippani also attended the meeting. The prolonged discussion concentrated on the following issues,

- Systematic knowledge about the cultivation of tobacco
- Problems associated with the availability of pre sowing inputs for tobacco
- Newer varieties of tobacco and their associated problems
- Marketing mechanism of tobacco crop
- Lack of complete knowledge about alternative crops
- Availability of inputs for cultivating alternative crops
- Need for Agricultural extension services
- Provision of lift irrigation facility from the nearby river

During the course of meeting, members of C.M.D.R. gave an idea of taking up dairy farming, which can act as good alternative activity by giving up tobacco cultivation. The idea behind this was to drag away excess labour, which was engaged in the cultivation of tobacco. One more objective here was to provide monetary insulation to the farmers who face the risk of losing income due to their shifting from tobacco. This idea was received well by the farmers, due to the fact that the dairy farming is a good income earning activity in the neighboring villages. These milk co-operatives are selling milk to the various milk processing units of both Maharashtra and Karnataka. Thus a three pronged strategy of controlling tobacco emerged out of this meeting.

- The first input of the intervention was to provide the information about the various alternative crops with newer varieties suitable to the weather and soil conditions of the village. In this regard it was decided to get the expertise of Agricultural Scientists and Progressive Farmers from other regions of the state, who have the know-how of cultivating such crops. The project team also considered providing seeds of such crops to those farmers who were ready to shift from tobacco cultivation.
- Second option was to get the financial assistance from the commercial banks to help farmers to undertake dairy activities. As the bankers had already assured of their willingness to participate in our intervention package, we started negotiating with senior executives of the banks, which have the branches in the project region.
- The third instrument of tobacco control was to examine the possibility of providing lift irrigation facility again through the assistance of banks. The only hurdle here was that of the perennial water flow in the adjoining

Vedaganga river due to the above explained inter state water sharing problems.

Based on the feelers received from this meeting, we called in the progressive farmers from Gadag region of the Karnataka State, which is a non-tobacco growing area. These farmers had the expertise in cultivation of Onions, Soybean, Groundnut, Chillies and Cotton. One of these, was recipient of the State Award for cultivating highest quantity of Chillies per acre. Another farmer apart from his agricultural operations was diversifying into Wormiculture. He had also participated in a conference on Wormiculture at Beijing, China and his visit to China was sponsored by the I D R C which has sponsored the CMDR study also. In their initial meeting with the project team at CMDR, they were briefed about the objectives of the study and the intervention programme at the project village. They explained to us about various details about agricultural operations, regarding the above listed crops of their specialization. They also felt that they would like to meet the farmers of the project village to get a first hand feel about the problems faced by the farmers in the project village. Accordingly, we arranged to take these farmers to Sidnal (Project village) where a good deal of interaction took place about the technicalities of growing alternative crops to tobacco. The farmers from Gadag told their counterparts at Sidnal that, they would develop the Onion seeds and give them for sowing in place of Tobacco. This suggestion was made in the background of the fact that the humid environment of Sidnal is not conducive for seed preparation. A good amount of exchange of information took place regarding Wormi-culture. In the same meeting we had one more important guest on that day. The motivator had sent a word to the local representative of the State Legislative Council (M L C) and he promptly attended the meeting. Members of CMDR appraised him about the nature of the project and intervention process to be launched in the village. The issue of inter-state sharing of water resources also figured in the discussion and he promised that the matter would be

taken up the Irrigation Ministry of Karnataka State. On the whole this meeting proved to be useful in bringing the farmers of two regions to discuss and exchange ideas about different ways of controlling tobacco cultivation.

Operationalising the Intervention :

After this meeting we intensified our efforts to operationalize the intervention process. Mahatma Phule University of Agricultural Sciences, Rahuri, Maharashtra was contacted to get the Onion seeds for the Rabi season of 1999. This season starts in the month of October 1999. But before that, the monsoon season (the usual rainy and sowing season of India) was nearing and hence we were keen that farmers take initiative to shift in this seasons itself. This is because, the Monsoon starts in the month of June and most of the crops are sown during the second or third week of June. The sowing of tobacco starts in the second and third week of August. So we wanted that the sowing of alternative crops must be done during June so that farmers can spare no land for the tobacco crop. In this regard we speeded up the procurement of Soybean seeds to distribute freely to the farmers. Soybean was chosen by CMDR as the alternative crop on the basis of the suggestions from the participating farmers.

Our efforts to involve banks into the intervention process were in progress simultaneously. And by this time, there was a change in the top brass of the Malaprabha Grameena Bank, which had a new Chairman. Our efforts to establish a rapport with him took sometime and the responses were quite encouraging. In the same fashion, we also took into confidence the senior executives of the Syndicate Bank's Regional office at Belgaum. Both these banks have branches in the project area if not in the project village. We requested both of these banks to assist the farmers to buy the milch buffaloes for starting the dairy activity in the project village. A series of meetings took place between

the project team and the bank officials to finalise the credit facility for the farmers. Finally the directions were sent by the banks to the respective branches in the project area, which are adjacent to Sidnal. The branches participating in the intervention are,

Malaprabha Grameena Bank (MGB) at Benadi,
Syndicate Bank at Akkol.

We approached the branch managers and explained the objective of the project and their role in the intervention. In both the places the response was good and they came forward to assist the farmers. The branch manager of Syndicate bank and the Field Officer of MGB, accompanied us to the project village and attended the meeting of farmers.

The bankers wanted to assess the village situation with regard to the availability of veterinary services in the village and about the marketing of the milk. They also used this opportunity to probe the probable creditors with regard to the repayment capabilities and their seriousness about undertaking dairy activity. Farmers were really sincere and convinced the bankers about the repayment of the loan. The prospective shifters of tobacco also made a suggestion that they would get the buffaloes from a place called Mehasana in the State of Gujrat. The breed, which hails from this place, gives highest liters of milk per day (about 10 liters in the morning and 10 liters in the evening) and hence is economically viable.

After about 5 to 6 sittings with the farmers the bankers were able to identify the eligible farmers who were to receive credit for buying the buffalo. These farmers were part of the list, which CMDR had finalised during our intense discussions with the villagers before approaching the bankers. **Thus, those who had volunteered themselves, to participate in our intervention programme were chosen by the banks.** About 100

farmers had expressed their willingness to join our effort in controlling tobacco cultivation. The modalities of extending the credit were worked in minute details Bankers handed over the list of documents that were required to avail of the loan. As per the requirement of the bank, CMDR took initiative to make a tripartite agreement between the bank branches concerned, the milk union which would buying the milk from the farmers and the farmer who is availing of the loan. The objective of this agreement is to safeguard the interest of the banks. The conditionalities of this agreement stipulate that, the milk union , which buys the milk from the farmers, is required to deposit the money in the concerned account of the farmer instead of paying to him directly. By this arrangement the bank can withdraw the equal monthly installment (EMI) from the farmer's account and adjust the same towards his loan account. The initial willingness letter of the Shri Gopalakrishna Dudha Utpadak Sahakari Sangha Ltd., Kunnur, (Shri Krishna Milk Producers' Co-operative Union Ltd., a dairy which is in operation in the region) to be a party to such an agreement was obtained and handed over to the respective bank branches. Thus the bank is assured of its repayment of the loan advanced to the farmer. At this juncture CMDR also thought of providing some incentive for the farmers directly as well as to bankers indirectly. We assured the farmers that as they go on reducing the cultivation of tobacco from season to season CMDR would paying Rs 250/- (Two Hundred Fifty only) per month upto a period of 12 months for all those who are buying buffalo. That is about 50 farmers would be benefited by this incentive payment. A written communication was also made to the respective branches in this regard. At this phase we had finalised about the dairy farming option in place of tobacco.

Our next task was to cater to the needs of other farmers who did not avail of the bank loan. Hence our efforts to obtain seeds for the approaching sowing season were intensified. Various seed companies and vendors were contacted for procuring quality seeds of Soybean, Sunflower and Groundnut. But as most of the farmers expressed their

willingness to go in for Soybean, we finally searched for the best quality seeds of this crop. The Karnataka Oil Federation, (KOF) a government of Karnataka supported co-operative organisation supplies quality oil seeds. The objective of KOF is to supply the oil seeds to promote the cultivation of oil seeds. It also buys the produce from the farmers to extract and refine the oil from the seeds, which is ultimately sold in the market at very competitive prices, for the benefit of consumers also. The KOF was selling the same brand of seeds which was suggested by agricultural scientists as well as by the farmers of Sidnal. In this background we bought the seeds of Soybean sufficient enough for about fifty acres of land. These seeds were to be distributed to the farmers free of cost, sufficient for one acre of land, to each farmer irrespective of the total land holdings of his family. This was the incentive from the project for farmer's gradual shifting from tobacco.

As the bank formalities were over and seeds were also bought, we thought of holding a function to mark the beginning of intervention scheme. On June 11th of 1999 the function was held in the School premises of Sidnal village. The function was graced by the following distinguished people.

Shri K.J.Ganiga
Chairman,
Malaprabha Grameena Bank,
Dharwad.

Shri Kamat,
Regional Manager
Syndicate Bank,
Belgaum.

Dr P.R.Panchamukhi,
Project Leader &
Director, CMDR.
Dharwad.

Dr.G.K.Kadekodi,
Research Professor,
CMDR, Dharwad.

Other officials:

Senior Manager (Advances ,Belgaum Division),
Malaprabha Grameena Bank (MGB) HO. Dharwad.
Regional Manager, MGB, Chikkodi.
Branch Manager, MGB at Benadi,
Branch Manager, Syndicate Bank, Akkol.
Field Officer, United India Assurance, Nippani,
Agricultural Scientist, ARC, Nippani,

Village Leaders :

R.P.Patil, Chairman, Sanmati Vidyamandir, Sidnal (An education society of the project village, which runs primary school and high school in the village).
P.P.Patil, Progressive Farmer and Motivator,
Teachers of the Sidnal school and

CMDR Research Team

Dr.S.Debi,
V.B.Annigeri,
N.S.Nayak,

The meeting was attended by more than 250 villagers. At the outset, project leader Dr.P.R.Panchamukhi gave an introduction about CMDR, nature of its activities and the focus of the ongoing project on “Economics of Shifting from Tobacco Cultivation”. The health hazards of tobacco consumption and cultivation were highlighted during his speech and he stressed the need for rooting-out tobacco from our society. He appreciated the initiative taken by the farmers of Sidnal in joining this project, which aims at gradual reduction of tobacco cultivation in this particular village. He made it clear that whatever lessons the project team learns from this experiment would be the guiding forces for replicating the same effort in other regions as well on a much bigger scale. Incidentally, CMDR had organised a press meet prior to this function. As a result, the leading national dailies like **The Time of India, Deccan Herald and Prajavani**, brought out details about the study and intervention scheme on the day the

function was held in the village. This was followed by the remarks by Chairman of the MGB and Regional Manager of the Syndicate Bank who equivocally supported the noble cause of the project and again reassured their respective banks' whole-hearted support for the farmers who have come forward to participate in the project.

In the same function, the cheques to the farmers whose loan applications were cleared by the respective banks, were distributed. This facilitated the farmers to buy the buffaloes. In all 30 farmers have bought buffaloes through the assistance of banks. CMDR has provided Soybean seeds to 46 farmers i.e. the seeds would cover 46 acres of cultivable land in the village.

After this CMDR team started carefully monitoring the ground situation. The progress of the intervention was satisfactory, and the farmers had significantly reduced the area under tobacco. The dairy activity picked-up well and bankers were happy to say that the repayment status of the loan advanced to the farmers was quite good.

A Few observations :

As the dairy activity has proved to be quite good in maintaining the family incomes coupled with dragging away the crucial input of labour from the tobacco cultivation, it deserves a further support in such intervention programmes. A milk processing unit in the village with good transportation facility would spread the diarying activity across the village, which means that the farming community would hold on to this, giving little attention to tobacco crop. Availability of transportation facility would also prompt them to grow more vegetables, which can be reached to the nearby markets quickly.

The above experiment has shown us that, the processes, which operate in bringing about a change to give up tobacco cultivation are quite complex.. We feel that the sociology of tobacco is much stronger than economics of tobacco. But nonetheless if proper and sincere efforts are made, we can bring about a gradual and lasting change, which can sustain shift from tobacco cultivation. Good agricultural extension service with regard to the alternative crops, ways and means of strengthening irrigation facilities (including uninterrupted electric supply), good network of storage and marketing facility for alternative crops can effectively manage and sustain the change.

While interventions to reduce demand for tobacco are likely to succeed, measures to reduce its supply are considered less promising and they are looked upon with an air of skepticism. This may be because, if one supplier is shut down, an alternative supplier gains an incentive to enter the market. Added to this, we must also take note of the fact that I T G A (International Tobacco Growers Association) has been raising its voices against control of tobacco cultivation. It says that it is prepared to combat idiotic crop substitution programmes , and it has plans to influence W H O and F A O to protect its interests. Thus the challenge of controlling tobacco cultivation has broader dimensions, which calls for a unified and well co-ordinated efforts in meeting this challenge.

APPENDIX



Regional Manager of Syndicate Bank addressing the farmers



Project Leader and Director CMDR, Dr.P.R.Panchamuhi distributing Soybean seeds to the farmer



Soybean Field



Soybean Field



Soybean Field



Regional Manager of Syndicate Bank distributing cheque to the farmer for buying buffalo



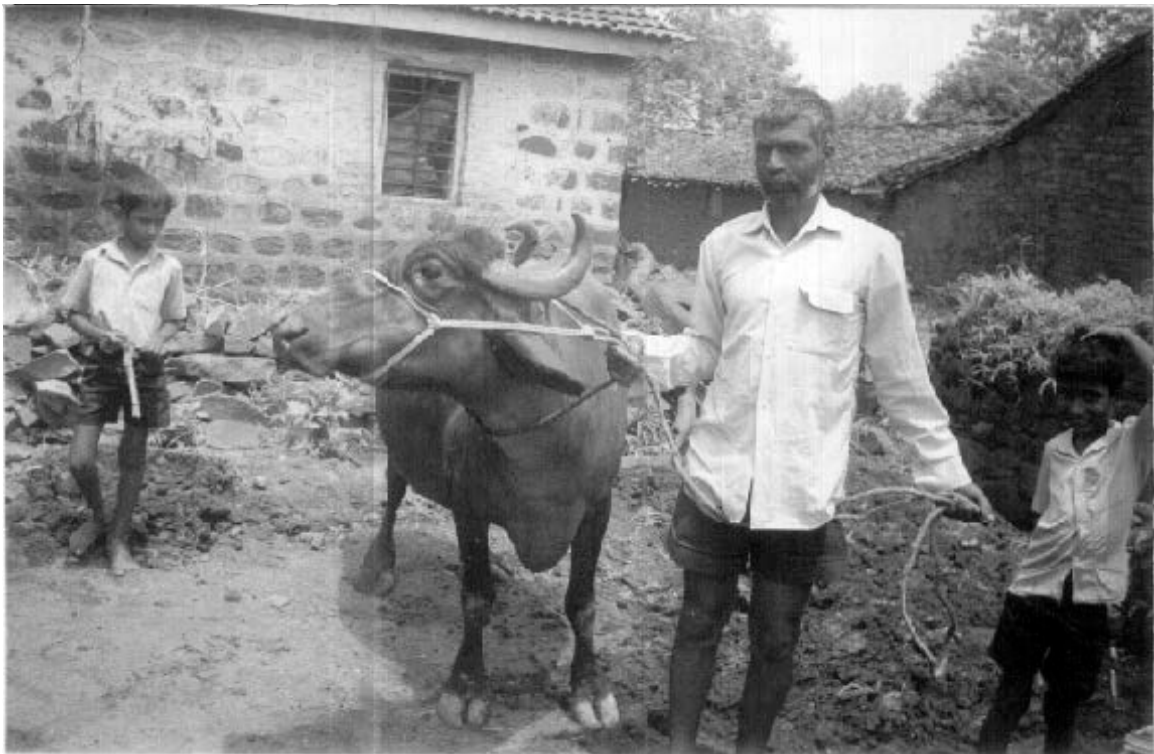
Chairman, M.G. Bank Bank distributing cheque to the farmer for buying buffalo



Farmer with Buffalo



Farmer with Buffalo





Farmers selling the milk