NATIONAL SEMINAR ON EDUCATION

Educational Planning & Developmental Planning

D B Thengadi

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PREFACE

On 9th July, 1974, the Akhil Bharatiya Vidyarthi Parishad completed 25 years of its purposeful existence. The organisation, therefore, celebrated 1974-75 to be its Silver Jubilee year. A Rajat Jayanti Samaroh Samiti was set up for the purpose and several programmes were undertaken throughout the year.

As part of the Silver Jubilee Celebration Programmes, the ABVP Rajat Jayanti Samaroh Samiti held a National Seminar on Education in Delhi on 9th and 10th February, 1975. This seminar, attended by 55 educationists, teachers and student leaders, discussed two papers on topics of great academic and social importance. The first paper was presented by Shri J. P. Naik, member-Secretary of **I.C.S.S.R.** and Advisor to the Central Ministry of Education, Secretary to the Education Commission 1964-66; and the topic was "Non-Governmental Efforts for Educational Reforms".

The second paper was presented by Shri D. B. Thengadi, General Secretary of the Bharatiya Mazdoor Sangh, who is an economist and a social thinker; the topic was "Educational Planning and Developmental Planning".

Professor Omprakash Kholi, Vice-president of ABVP, and President, Delhi University Teachers' Association was the Convenor of the seminar held in the serene atmosphere of the Constitution Club, Delhi.

The seminar was attended, among others, by Dr. D. S. Kothari, Ex-chairman of the Education as also of the University Grants Commission.

The deliberations were presided over by the President of ABVP, Prof. Bal Apte, who also gave the valedictory speech. It is my pleasure to present here one of the papers presented to the seminar.

We are confident that this seminar will prove to be a beginning of the beginning and will soon develop into an academic movement of thought and action oriented to the best interests of the academic community, in the wider context of Social Change and National Reconstruction.

It is my pleasant duty to sincerely thank Shri Korde and Shri Talwalkar of the Vividha Enterprises who have done a neat job of printing. It will not be out of place if I mention again here our gratitude to Shri J. P. Naik and Shri D. B. Thengadi.

Madan Das
Chairman
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Planning

The United Nations Experts Committee Report observes, 'The term "Plan" is used in different senses, of which we distinguish four. First, in some countries, it refers only to the making of a programme for public expenditure extending over from one to say ten years; secondly, it refers sometimes to the setting of production targets, whether for private or for public enterprise, in terms of input of manpower, of capital or of other resources, or else in terms of output; thirdly, the word may be used to describe a statement which sets targets for the economy as a whole, purporting to all scarce resources among the various branches of the economy. And fourthly, the word is sometimes used to describe the means which the Government uses to try to enforce upon private enterprise, the targets which have been previously determined.'

'The word has also other meanings. In some of the literature, it is synonymous with geographical zoning, or 'town planning'. There is also a highly specialised economic theory literature in which it refers to the working of an economy exclusively by central direction, where each production unit uses the resources allocated to it by quota, and disposes of its production by direction.'

No Monopoly of Communists

Planning is no longer the monopoly of communist countries. Even in U.K. or U.S.A. there is no aversion to planning. In his 'Economic Basis for Lasting Peace' Mr. Strettinius of U.S. says, "It seems to me that to assemble all pertinent facts, analyse them and to plan ahead on the basis of these facts, is merely the most elementary common sense. If those of us who are in a position of responsibility did not plan ahead, we would be guilty of criminal negligence." The 'European Co-operation' explains the fundamental facts that constituted the basis of a Four Year Plan of United Kingdom for 1949-53. In 'An International Economy', Shri Gunnar Myrdal observes, 'All special advisors to the under-developed countries who have taken the time and

trouble to acquaint themselves with these problems, no matter who they are — teams of experts from the International Bank or other international agencies, including the Colombo Plan officials of the American Point Four Programme, private foundations and consultant firms, independent social scientists; journalists or visiting politicians — all recommended central planning as a first condition for progress.' There is a growing realisation that the annual 'budget' should become an 'annual plan' — 'a powerful instrument of moulding the economic behaviour of the people.'

In India

In India, the first Five Year Plan was officially presented to the Parliament on December 8, 1952. But the first attempt at planning was made by Shri M. Visweswarayya in 1933 when he published his book 'Planned Economy for India'. This was followed subsequently by many other plans, official as well as unofficial — such as, The Nehru Committee Plan, 'Bombay Plan', 'Peoples Plan', 'Gandhian Plan' etc., though none of these gave an integrated and comprehensive picture of the economic development of the country. For this task, the Planning Commission was set up in the year 1949, and its functions were defined by a Government of India Resolution of March, 1950.

The Failure : Causes

It is needless to trace the history of Indian Planning during the last twentyfive years. The present unenviable plight of the abortive fifth Plan adequately symbolises the quality or calibre of our planning process. Number of factors may be responsible for its failure, and apportionment of blame may not be healthy at this juncture. But one fact is indisputable. More than any other factor, the lack of general educational level has contributed most to the failure of Indian planning.

Speaking at New Delhi on January 9, 1975, Mr. Francis Blanchard, Director-General of the International Labour

Organisation, highlighted the role of education and training system in coping with employment and income distribution problems. He regretted that the entire educational set up was primarily geared to the minority climbing up to the top of the educational ladder. Mr. Blanchard enumerated the necessary economic measures, such as, collection of complete statistics on unemployment; extensive redistribution of assets by land-reform, promotion of small-scale enterprises and redirection of credit facilities in favour of the poorest sections of the society, encouragement to consumer-goods industries; appropriate changes in government taxation and expenditure; the search for competitive, labour intensive and energy-saving techniques; and appropriate policies on population, technology, trade, foreign investment and education, reflecting the social objectives of development.

Obviously, in the absence of a general rise in the level of public education, even the best conceived plan cannot yield the desired results.

The Only Way

We do not know whether we are, to use Lerner's terminology, a "society-in-a-hurry" "invested with the insignia of democracy but lacking real participant responsibility"! But, to be sure, neither democracy nor planning can succeed if a common man, for want of adequate education, is unfit to participate in the process. This may be a very patient task. But what M. N. Roy said about public education in the context of democracy is equally relevant and valid in this context also. Shri Roy remarked, "It may be a long way; but if it be the only way, then it is also the shortest one.'

Hence the propriety of tagging 'educational planning' with 'developmental planning'.

Education

'Education' means drawing out what is within !

It is a considered view of Rishi Aravindo that 'that alone will be a true and living education which helps to bring out to full advantage, makes ready for the full purpose

and scope of human life all that is in the individual man, and which at the same time helps him to enter into his right relation with the life, mind and soul of the people to which he belongs and with that great total life, mind and soul of humanity of which he himself is a unit and his people or nation a living, a separate and yet inseparable member.'

The education of a human being should begin, according to The Mother, at his very birth and continue throughout the whole length of his life. "Indeed", says The Mother, "If the education is to have its maximum result, it must begin even before birth : it is the mother herself who proceeds with this education by means of a twofold action, first, upon herself for her own improvement, and secondly, upon the child which she is forming within her physically." The parents must know that "the first thing to do, in order to be able to educate the child, is to educate oneself, to become conscious and master of oneself so that one does not set a bad example to one's child ..... Sincerity, honesty, straight-forwardness, courage, disinterestedness, unselfishness, patience, endurance, perseverance, peace, calm, self-control, are all things that are taught infinitely better by example than by beautiful speeches". Parents are the first natural teachers; home the first natural school. (H. W. Beecher says, Mother's heart is the child's school-room'.)

Environment in the early childhood is also imperceptibly educative. Dr. N. R. Warhadpande conclusively proves that both heredity and evironment are important in producing individual differences (Abilities and Education). Thus general level of literacy and moral values obtaining in the society conditions to a considerable extent the educability of a child.

Literacy

Socio-Economic progress marches with literacy. Adam Smith shows how necessary literacy is to agricultural progress. Alfred Marshall feels that the best investment a State could make is in the education of its citizens. J. L. Hammond

points out that while the factory was taking the place of the cottage, the newspaper the place of the pageant, illiteracy was the greatest obstacle to progress. Stating that literacy figures for underdeveloped countries generally overestimate the actual spread of literacy; that their enrolment figures give an inflated account of school performance; that the rate of school attendance for girls, children in rural areas, and generally children in poorer districts and countries becomes more inflated when measured by the enrolment statistics; that in South Asian countries the goal of 'universal literacy through free and compulsory education' has, because of misconception, downgraded adult education; and that identification of 'investment in man' with education has, again, on account of misconception, resulted in the treatment of education in the form of financial expenditures having a financial return, Shri Gunnar Myrdal asserts "Any attempt to create an integrated nation with wide participation of the people assumes a more widespread literacy. That an approach to effective political democracy would have the same prerequisite is clear".

In Brazilian educator, Paulo Freire's hands, literacy is a weapon for social change. Education becomes the means by which men can perceive, interpret, criticise and finally transform the world about them.

In India, literacy is too low. As Laubach, an expert on literacy, notes, "practically all the illiterate people of India are in debt, and since they cannot read they do not know what the account says and they must believe what the literate money-lender tells them".

As M. Ruthnaswamy says in his Agenda For India, Russia became totally literate in the space of 30 years. In developing countries other than India, first and foremost attention has been paid to the promotion of literacy. In Cuba from the day after the Revolution, the campaign against illiteracy was given first priority. In 1958 about 26% of the people were illiterate; today the illiteracy has fallen to two percent. Primary education is universal, free and compulsory.

Adult education centres (for Fidel Castro cannot wait till the young in primary school system grow up) have been added to the basic school system and between 1962 and 1967 about 333,000 completed their education up to the 6th grade. that is roughly up to the secondary school stage. In Bolivia there are relatively few illiterates, about 16.9%. A pilot project literacy training for 36,500 adults is to be organised and training courses in agricultural techniques for another 10,000. Other developing countries in Latin America have the same pleasing account to give. Peru has 60% literates, Chile 88%, one of the highest rates in South America, and Mexico 65.4%. Countries nearer home have a better record than India. Thailand reached a percentage of 70.8 ten years ago. Burma has a literacy attainment of 57.1%, thanks mainly to its Buddhist monastic schools.

Advancing towards literacy is taken in urgent earnest in other developing countries. According to a recent UNESCO report, some Arab countries have placed before themselves the goal of total literacy within certain age levels in the space of ten years. In the Phillippines, a Government decree issued regulations organising a systematic literacy campaign over six years, 1966 to 1972. Burma has set an even shorter period to attain the same end. In Iran, the IV Five Year Development Plan, 1967-72, envisages a 30% reduction in illiteracy.

Compared to the record of these other developing countries, India does not figure in the list of countries in which rates of new literates over 15 years of age are in excess of 5% published in the recent UNESCO report where the Cameroons, Chile, Cambodia, Iran, Kuwait are found. Nor does India figure in the list of countries with increased literacy budgets whereas the Dominican Republic, Malayasia, Nepal, Pakistan, Tanzania, Thailand, Zambia do.

M. Ruthnaswamy further says, "And illiteracy, if it is to be defeated, must be attacked in a multi-front campaign. As a report on Mass Education in the British Colonies in Africa urged about twenty years ago, not only the Education Department but all Government departments like the Re-

venue Department (to show the farmers how useful literacy would be in their attempts at greater productivity), the Health Department (to show the connection between literacy and hygienic and higher standards of living). And the mass media of communication of cinema, the radio and now television ought to be pressed into service for converting the people. Special efforts have to be made to make women interested in literacy and becoming literate. Women's literacy is only half that of men's. How can any social progress be secured and swift, if the women are illiterate? As the old educational maxim has it, 'When a man is educated an individual is educated, when a woman is educated, a whole family is educated.' In his "India : The Awakening Giant" W. S. Woytinsky observes, "We noticed nothing similar to that crusade in India; we heard complaints about mass unemployment among young graduates of the universities, but we could get no answer to the question : 'why cannot a million of them be mobilised for rural teaching?'. Such a mobilisation would be possible if Indian intellectuals felt the urgency of primary education for the villages as keenly as did the Russian intellectuals in the days of my youth." The Kothari Commission wants that the national percentage of literacy should be raised to 60 by 1971 and to 80 by 1976. Obviously, we have to treat this problem on war footing.

Living And Learning

But this literacy campaign and the primary education programme — which includes, incidentally, instruction in cleanliness, elementary hygiene and civic sense — must be in keeping with the conditions and the requirements of the country. There should be no bifurcation between living and learning. 'Work experience' should constitute not just an appendage but an integral part of the educational programmes at every level. The campaign and primary education should be linked up with crafts and occupations that are actually in existence, and there should be no stress on furnishing irrelevant academic information at those levels. The evaluation of the Nai Talim system as introduced and implemented so far may be a separate — and even contro-

versial subject. But 'integration of physical and manual labour into one whole' and 'the use of both as a unity' is a must. Some relevant questions raised by Revered Vinobaji are important. For example, whether we can have teachers who would follow their respective professions or trades during day-time and teach the village students during evening or night; whether we can evolve a system of not only 'earning and learning' but of 'earning through learning and learning through earning', — so that even as a student, one should be enabled to make one's contribution to the national production and, simultaneously, that production should meet part of the cost of the education; whether it would be advisable to change the timing of holidays in keeping with the requirements of agriculture and allied industries; whether the scheme of 'One Hour School' proposed by him would be practicable and beneficial. For furnishing square replies to these questions, further study and investigation would be necessary. But most of his basic principles are certainly in consonance with the indigenous traditions and conditions. 'It is the task of education to make students self-sufficient in the matter of acquiring knowledge.' 'Education means the attainment of self-sufficiency in learning. Our motto must be 'Education for self-sufficiency upto sixteen; education through self-sufficiency after sixteen'. Education ought to be able to claim that it can protect the country by the power of non-violence. The goal of education for the nation, for the humanity, must be freedom from fear — not only for this country but for the world-wide community of man. The more closely we can live in harmony with nature, the greater our welfare and happiness will be. Work and knowledge must never be separated. Education through work. Rather, education should be a by-product of practical work. All the faculties of a student should develop as a harmonious integrated whole. The whole educational philosophy of India can be summed up in the three words — Shruti, Smriti and Kriti. In the Upanishads, King Aswapathi claims that in his kingdom no one is ignorant or unemployed. Every Vanaprastha must be a teacher and every wandering Sanyasi a University. There is no obstacle in village life for

the development of scientific concepts. The foundation should be laid in the organisation of the 'one-hour school'. The only kind of school that can be called a family-school is one that recognises that the foundation of education is a home where the pupils live with the teachers and build up its teaching around that. On the one hand the school should enter the home, and on the other, the home must penetrate into the school. The purpose of integrated method of teaching is to give knowledge through a handicraft. The integration of the 'merely method', the 'appendix-method', the 'balanced method' and the 'project method'. The integrated method takes as the medium of education some many-sided craft which is intimately related to life. This craft is not merely a tool of education, it is an indivisible part of it. Through the craft, three objectives are to be reached — (1) the all-round development of the children's innate faculties, (2) the teaching of the various kinds of knowledge that are useful in life and (3) the acquirement of a skill by which the children can earn their living. Education must include Brahma-Vidya and Craft. The teachers should grow in learning along with the taught. As declared in 'तेजस्विनावधीतमस्तु' । Let our (Joint) learning be brilliant.' The process is that of learning along with the student. In all the fourteen languages recognised in the Constitution of India, there is no verb 'to teach', but only a verb 'to learn'.

It is worth noting that Shri Vinobaji has further elaborated and systematised the thoughts of Revered Mahatmaji on education. His scheme is not just an Indian version or adaptation of John Dewey's Instrumentalist principle of 'Learning by doing', it is rooted in Indian Culture. Gandhism, which considers school as a field of moral training to produce men and women of deep religious conviction devoted to tolerance, peace and mutual co-operation, lays great stress upon 'agriculture (as the ultimate industry of man), ruralisation of population (against the modern world-wide trend towards rapid and even premature urbanisation), small-scale self-sufficiency with high 'want-get' ratio, maximum dispersion of industry in small rural, semi-rural units, co-operation instead of competition, and a de-centra-

lised instead of State planned economy. Curiously enough, on the question of learning through doing, even Karl Marx is in agreement with Gandhiji when he observes, "The education of the future will in the case of every child over a certain age, combine productive labour with education (unterricht) and athletics (gymnastik) not merely as one of the methods of raising social production but as the only method of producing fully developed human beings." Fromm says that a mentally healthy person has developed a zest of living that includes a desire for activity which is reflected in an attitude of utilising whatever potentialities he possesses, in productive forms of behaviour" (Man for Himself).

Bharatiya Technology

Sharing broadly the spirit behind such thinking, Revered Shri Guruji required our technologists to devise and introduce, for the benefit of artisans, reasonably adaptable changes in the traditional techniques of production, without incurring the risk of increase in un-employment of workers, wastage of small savings and also of available managerial and technical skills, and complete decapitalisation of the existing means of production. He also wanted them to evolve our own indigenous technology with great emphasis on decentralisation of the processes of production, with the help of power, with home, instead of factory, as a centre of production. He urged for evolution of the technology that would increase the employment potential of each Rupee of industrial investment without increasing cost per unit of output — the technology capable of reconciling growth in employment with industrial efficiency. Suitable elementary parts of such technology should constitute an integral part of the programme for early as well as adult education, he felt.

Samskaras

He, however, laid greater emphasis on imprinting appropriate 'samskaras' on mind in early age or during formative stage. The virtues, the habits, the values of life essential for national reconstruction, must become part of the earliest education, he insisted. While enumerating

national objectives of education, the Kothari Commission ought to have given first priority to the cultivation of social, moral and spiritual values, he thought. Man is the main instrument of change; only 'samskaras' in early age can equip him mentally, morally and spiritually to play this role effectively.

Re-orientation

Shri Guruji stood for complete re-orientation of the system of education with a view to fulfil total developmental and employment needs of the country and to facilitate simultaneously complete unfoldment of potential talents, faculties and aptitudes of every individual. It is the duty of the Society — including the State — to offer fullest scope to every individual for his fullest development according to his nature and aptitutdes so as to fully utilise all faculties of all individuals for the cause of national prosperity. The test of successful Planning, according to him, was to equate, as fully as possible, the sum-total of the contribution of all, such fully developed as well as developing individuals with the total requirements of the nation. But this could not be achieved unless and until the level of national consciousness was raised adequately. With this end in view, the foundations are to be laid — the seed is to be sown, in the early part of every life. This, he stressed, was the most essential part of early education for national development.

Change In Planning Style

It was against this background that Pandit Deendayal Upadhyaya pleaded for a change in the style of Planning. The Planning should be evolved from below, and not imposed from above, he said. The micro-plan formulated by every plan-conscious individual should form the basis of national planning, though the same may be modified subsequently in the process of plan-co-ordination at higher levels. Again, austerity, simplicity, thrift, character, industriousness, the spirit of co-operation and dedication, — all these cannot be ensured in absence of early 'samskaras'.

The importance of this psychological aspect has very ably been explained by Dr. V.K.R. V. Rao in his "Education and Human Resource Development". Lofty ideals must be placed before mind in early age. "It is the nature of man", says Pascal, "to believe and to love; if he has not the right objects for his belief and love, he will attach himself to wrong ones."

Importance of Agriculture

In a country like India, the educational system ought to have recognised 'the supreme importance of agriculture' and allied industries. The Kothari Commission has rightly said that 'a programme of education for agriculture will have to be based on an effective organic link between the three main elements of teaching, research and extension'. While its recommendations on Agricultural Universities, contribution of other Universities, Agricultural Polytechnics, Agricultural education in schools and also as a part of general education, extension programmes, man-power needs and the role of the ICAR and UGC are quite sound as a part of long-range planning, agriculture-oriented adult education in rural areas is the immediate necessity and should, therefore, form a part of the drive for literacy, primary education, and adult education. It should not be forgotten that in spite of the Green Revolution, the H.Y.V. programmes, the New Strategy for Agricultural Development, chemicalisation of agriculture through the massive emphasis on fertilisers and pesticides, the re-organisation of agricultural research with greater stress on science and technology, and an impressive institutional framework, we have failed so far to identify the 'Rural Poor' on any scientific basis. ensure availability of the credit, inputs and technical assistance to small farmers, compel large agricultural incomes to finance fresh investments in minor and major irrigation, power, etc., provide adequate storage, processing and transport facilities, pay serious attention to development of water-resources, scientific re-consolidation of lands, construction of approach roads and drainage work, levelling of land, digging of field channels, etc., and thus

build up infra-structure for rural development. Worst of all, even the relevant information regarding power, water, soil, plant nutrition, soil-water-plant relationship, etc., is also lacking till now. Even the basic problems of the shortage of drinking water over vast areas or power constraints on agricultural development have not been duly attended to.

The development of this much-neglected essential sector cannot be expedited relying only upon the expeditious implementation of the recommendations of the Kothari Comission in this respect. As observed earlier, they are quite sound as a part of long-range planning; but to keep pace with the urgency of the immediate economic crises, it is essential that 'development consciousness' must be roused among the rural masses that are mostly illiterate or semi-literate and immediately useful information and skills be furnished to them — treating this as an integral part of our adult education programme.

The curriculum of this urgent part of adult education programme in rural areas must, however, be formulated in the light of the long-range strategy to be evolved realistically. The usual adhocism should not be resorted to in this field. The curriculum must be formulated immediately; but its basis must be a well thought-out policy on agriculture. We must be quick without being hasty. No use going futher and meeting the worse. Dr. B.S. Minhas has rightly observed that 'the formulation of a long-range strategy of attack on low-and rural poverty would seem to require definite answers to some fundamental questions. What, for instance, would be the state of rural economy that we envisage ten to fifteen years from now? What will be the effect of the recent (agreed to but yet to be implemented) agrarian reforms on non-viable farmers? Do we expect the numbers of non-viable farmers to increase further through partitioning of currently non-viable holdings? What view do we take regarding leasing-in and leasing-out practices in relation to the economy of small and marginal farmers? How soon can we complete a scientific consolidation of lands and

attempt to bring together lands of small holders conveniently in one place? To what extent can associations of small farmers be fostered and a co-operative management technology tried on the pooled resources of small and marginal farmers? What administrative reforms and institutional re-arrangement would be necessary for organising integrated development in small local areas? What is it that we visualise for a large number of small farmers in dry areas? Will they have to seek off-farm work? How much off-farm work is likely to be available for the non-viable farmers and agricultural labour during the next 5-10 years?

Without this information and decisions based upon it, it would not be possible to work out a strategy for our rural areas. In the light of such a strategy, the relevant curriculum for adult education should be formulated.

Re-drafting Industrial Map

If we are earnest about overcoming the present economic crisis, it is obvious that we must redraft the industrial map of India, bringing fresh thought to bear upon the subject of the technology, the size and the location of various industries. We will have to chalk out our own path of industrialisation. We may study thoroughly and assimilate industrial technology all over the world, but we must locate and introduce such parts of foreign technology as are suited to Indian conditions. We can derive immenese benefit from the Buddhist Economics of Dr. Schumacher. For the fullest utilisation of our man-power and resources, it would be necessary to organise in different rural and semi-urban areas the predominently labour-intensive, small scale and medium industries, — keeping in view the availability of the raw material, labour costs, transport facilities, and the local market. This is to be undertaken expeditiously and in a big way. Obviously, different industries would suit the conditions obtaining in different regions. These small, low-production technology, subsidiary industries would also require some short-term training on the part of its employees. And the training thus required would be so

elementary that it would be outside the pale of all formal education — even of the vocationalised secondary education. Again, it would be diverse in nature — differing from region to region and industry to industry. It would be extremely difficult and impracticable to integrate short courses for this purpose with any regular system of formal education. For example, short tuitions in upholstery, cookery, dress-making, home-management, millinery, knitting, embroidery, tailoring, etc. to uneducated house-wives, widows, and rehabilitated prostitutes; newar-weaving and other light craft training to criminal-prisoners; laundry and drycleaning work; hair-dressing; motor vehicles painting; flower-display; grocery; etc. Again, which regular course can assist the Vanavasis to organise their own labour co-operatives or to work out the simple forest-based industries? Neither Vanavasis nor their industries can wait till some of them complete the vocational training in secondary schools. Probably, that much training may not be so very necessary also for their limited purpose. The same is the case of mass drives for cleanliness, elementary hygiene and civic sense.

Adhoc Educators

For the success of such drives, what is essential is the eaernestness and sincerity of purpose rather than higher educational qualification. Coupled with missionary zeal even less educated persons would be able to organise such campaigns on mass-scale. In the agricultural sector also, similar short courses on various aspects would be necessary. This is not to undermine the importance or status of regular formal education. No; far from that. Its value is certainly abiding. But the urgency of the present situation requires a dynamic approach with the spirit of experimentation. Such short courses are of immediate importance, though without abiding value as a part of regular educational programme. To formulate region-cum-industry-wise curricula for such various short courses is practicable, though highly unconventional. Organisation of such informal education would necessitate the raising of cadre of dynamic and im-

aginative activists not suffering from intellectual or mental inertia. They may not be highly qualified in the formal sense. In fact, what 'barefoot-doctors' of modern China are to regular medical practitioners, these ad-hoc educators would be to the regular, professional educationists. Our educationsists may be surprised to note the volume and the extent of informal education necessary at this stage to meet the challenge of the extraordinary circumstances.

Now, the tasks enumerated above cannot be accomplished without the active participation of a huge army of social workers with missionary zeal. How to raise this army of missionaries?

The Role of Socio-Cultural Leaders

This work cannot and should not be undertaken by the Government. Even regarding the formal education, D. P. Hoffman, in 'THE COMING CULTURE', observes, "In a highly centralised industrial state it is virtually impossible to educate contrary to the interests of the economic power in political control." In his 'PHILOSOPHY OF INDIAN EDUCATION', M. Varma explains how, in 'view of the fact that peoples' participation is still rudimentary in political life, 'the State Control of education through the grant-system much more expanded and ramified is totalitarian and nearly destroys the autonomy of educational institutions except in matter of minor details. This has led to a wide-spread and deep 'politicising' of education'. While the need to depoliticise the formal educational institutions is being strongly felt, it would be unwise to expect that the informal education mentioned above can be entrusted to the Government. It is the duty of the socio-cultural leaders to raise, encourage, inspire and guide the properly trained and qualified social workers in the country, and to review, balance and integrate the social and educational work that is being done by the various official and unofficial, local and national, voluntary agencies and schemes. The short-cut of Governmentalisation will cut the whole thing short.

Yet another variety of education which is likely to at-

tract public attention in the immediate future is not only extra-curricular but even unconventional. For any reason whatsoever, all in our country seem to have suddenly become revolutionaries — realistic or romantic.

Revolution may be bloody or bloodless — following the dictum of Barthelemy de Light's 'The more violence, the less revolution', but it is necessarily preceded by revolutionary education.

Revolutionary Education

According to Paulo Freire, who is one of the Latin American authorities on revolutionary education, education today is suffering from narration sickness. It becomes an act of depositing, in which the students are the depositories and the teacher is the depositor. Instead of communicating the teacher issues communiques and 'makes deposits' which the students patiently receive, memorize and repeat. This is the 'banking concept of education' in which the scope of action allowed to the students extends only as far as receiving, filing and storing the deposits. Verbalistic lessons, reading requirements, the methods for evaluating 'knowledge', the distance between the teacher and the taught, the criteria for promotion; everything in this ready-to-wear approach serves to obviate thinking. The banking concept of education is based upon a mechanistic, static, naturalistic, spatialised view of consiousness; it transforms students into receiving objects. It attempts to control thinking and action, leads men to adjust to the world, and inhibits their creative power. It stimulates the teacher-student contradication, and avoids the threat of student 'conscientization' by which is meant the learning to perceive social, political and economic contradictions and to take action against the oppressive elements of reality.

Freire stands for the methodology of thematic investigation and 'problem-posing' education through dialogue, under which the teacher-of-the-students and the students-of-the-teacher cease to exist and a new term emerges: teacher- student with students-teachers. Here, no one teaches another, nor is anyone self-taught. Men teach each

other, mediated by the world, by the cognizable objects which in banking education are 'owned' by the teacher. The unfinished character of men and the transformational character of reality necessitate that education be an ongoing activity. Education is thus constantly remade in the praxis. The teacher-student and the students-teachers reflect simultaneously on themselves and the world without dichotomizing this reflection from action — and thus establish an authentic form of thought and action. Liberation is a praxis : the action and reflection of men upon their world in order to transform it. What is needed is not verbalism, nor activism, but praxis. The teacher's thinking is authenticated only by the authenticity of the students' thinking. Authentic education is not carried on by A **for** B or by A **about** B, but rather by A **with** B, mediated by the world. The programme-content of education must be constructed, not according to the wishes of the educator, but according to the needs of the taught about which they are conscious. (Mao says, "There are two principles here : one is the actual needs of the masses rather than what we fancy they need, and the other is the wishes of the masses, who must make up their own minds instead of our making up their minds for them. We must teach the masses clearly what we have received from them confusedly". A profound love for the world and for men, humility, an intense faith in man, hope and critical thinking, these are the pre-requisites for successful dialogue which results in mutual trust between the participants. To be sure, this is 'a slow and patient task' as Che Guevara put it).

The educational, dialogical quality of revolution is one of the most effective instruments for keeping the revolution from becoming institutionalised and stratified in a counter-revolutionary bureaucracy; for counter-revolution is carried out by revolutionaries who become reactionary.

True, neither in his 'CULTURAL ACTION FOR FREEDOM' nor in 'PEDAGOGY OF THE OPPRESSED' Paulo Freire lays any tall claim for his theories. But revolutionaries — including 'total' revolutionaries — need not

hesitate to benefit by his experience, — before Markuse, Frantz Fanon, Laing or Debray begin to sway young minds in our country.

Be it as it may, it is certain that this type of unconventional education, howsoever important it may appear to be today, cannot be an essential ingredient of any regular or durable educational system.

Secondary Stage

After completion of primary education, one enters the stage of secondary education.

It is unfortunate that the problem of secondary education has not yet been dealt with, with the seriousness it deserves. The Rashakrishnan Commission has rightly observed that "our Secondary Education remains the weakest link in our educational machinery and needs urgent reforms".

For large number of students, secondary education should form the main core of education, so that after completing it, they should be able to enter life straight way — if they so choose. For this purpose, secondary education should be made as complete and perfect as possible. M. Ruthnaswamy claims that this can be done. It has been done elsewhere in the world. In different countries, developed or developing, only a small proportion of those that pass the High School proceed to the University or other higher institutions of education. They have therefore to make their high school education as complete as possible. In England, not only the Public Schools (Eton, Harrow, Winchester) but the Grammer Schools and the new comprehensive schools offer such form and degree of education. Winston Churchill's career was built on the High School education he got at Harrow. In France, Germany, the U.S.A., high schools offer such a kind of education to the vast majority of students. It is the desire to make this stage of education as satisfactory as possible that is behind the English policy of raising the age of school leaving from 15 to 18, he says.

To give such a kind of education, the curriculum of a high school must find room for all those subjects and skills that go to equip an educated person in modern age. All his faculties, physical, mental, intellectual and moral must be so trained as to produce the whole man fit for the social life.

The Secondary Education Commission remarks that the aim of secondary education is to train the youth of the country to be good citizens, who will be competent to play their part effectively in the social reconstruction and economic development of their country. As early as in 1882, The Hunter Commission observed, "The great majority of those who prosecute beyond the primary stage will never go beyond the curriculum of the middle, or at farthest of the high schools. It is therefore of the utmost importance that the education they received should be as thorough and sound as possible". The Hunter Commission anticipated diversified courses of instruction in the secondary stage of education. With regard to vocational and technical education, it recommended that in a particular class of high schools there should be two avenues — one leading to the entrance examination of the University and the other of a more practical character intended to fit the youth for commercial, vocational or non-literary pursuits. The Sadler Commission of 1917 recommended that the dividing line between the University and Secondary courses be drawn at the Intermediate Examination than at the matriculation, and that Intermediate classes be attached to High Schools, and a Board of Education be set up to control High School and Intermediate Education. The Hartog Committee of 1929 recommended that a large number of pupils intending to follow certain avocations should stop at the middle school stage. There should be more diversified curricula in the schools. More boys should be diverted to industrial and commercial careers at the end of the middle stage, preparatory to special instruction in technical and industrial schools. The Sapru Committee of 1934 remarked that diversified courses of study be provided at the secondary stage and that, that stage be made more practical and complete in

itself and more closely related to the vocational requirements of different types of students. "At the secondary stage, side by side with the general course leading to the University, there should be parallel courses offering instruction in technical, commercial, industrial and other vocational subjects." The Abbot-Wood Report (1937) suggested a complete hierarchy of vocational institutions parallel with the hierarchy of institutions imparting general education. Consequent to the recommendations in this Report, a new type of technical institution called the Polytechnic came into existence. The Sargent Report (1944) visualised a system of universal, compulsory and free education for all between the ages of 6 and 14, and recommended that at the Middle School stage, provision should be made for a variety of courses extending over a period of five years after the age of 11. These courses while preserving an essentially cultural character should be designed to prepare the pupils for entry into industrial and commercial occupations as well as into the Universities. The High Schools should be of two main types: (a) academic and (b) technical. The Radhakrishnan Commission stressed the importance of Intermediate colleges and recommended that "the standard of admission to University courses should correspond to that of the present Intermediate examination."

The Secondary Education Commission has rightly remarked that "it will serve no useful purpose at this stage to ponder over the possible developments that might have resulted had the recommendations of the previous Commissions and Committees been implemented." Pleading for inclusion of science educatioon and work-experience as an integral part of all education, the Kothari Commission recommends, among other things, increasing vocationalisation of secondary education, compulsory social service, secondary schools of two types — high schools providing a ten-year course and higher secondary schools providing a course of 11 to 12 years, transfer of the pre-university course from the universities and affiliated colleges to secondary schools, and lengthening the duration of the higher secondary stage.

The S.E. Commission has stressed the need for the training of character, the improvement of practical and vocational efficiency, and the development of literary, artistic and cultural interests. Warning that quality should not be sacrificed to quantity, it has pleaded for early steps to improve the status, the security and emoluments of the teaching profession with a view to make it more attractive. It has recommended, along with other things, the introduction of new curricula, re-organisation of the training college courses, new organisational pattern, dynamic methods of teaching, a new approach to examination and evaluation, and guidance and counselling in secondary schools. The Commission has done justice to the task assigned to it.

Clearing The Decks

While it should be our endeavour to offer full scope for fullest development of every individual, it must be recognised realistically that, as N. D. Sundaravadivelu puts it, "a good percentage of our freshmen in the colleges drift to these institutions just because there is nothing else that they can do. They have very little motivation just then for higher education!" What they need immediately is jobs, and most of the jobs they accept later on do not require higher education, though the degree is considered today as a passport to employment. For the recruitment of clerks and similar categories, upper age limit should be reduced and non-graduates preferred. Dr. C. D. Deshmukh suggests that the maximum age for recruitment of Governments' Class III service should be reduced to 20. He wants the decks of university education to be cleared of much raw, unsuitable and ill-motivated human material (about two-thirds of the college and university population under the prevailing system), and the strain on teaching resources, university or college buildings and equipment to be reduced. Number of categories of clerical and other jobs can be reserved for non-graduate matriculates only. If secondary education is made as perfect as possible, it can be 'regarded as the terminal stage of education for the vast majority of

our educated youth.' They will not be required to waste a precious part of their life in higher education in which they drift aimlessly; these years can be well utilised in the service of the country; and the task of ensuring good standards of higher, especially university education will be much simplified. While denial of opportunity of higher education to any aspiring student is criminal and unpatriotic, his aimless wanderings in the realm of higher education is a loss to the nation which is deprived of his contribution during that period, as well as to himself — if he subsequently accepts a job for which higher qualification is not necessary.

Career Master's Role

The Secondary Education Commission has recommended that the services of trained Guidance Officers and Career Masters should be made available gradually and in an increasing measure to all educational institutions, so that guidance may be given to students at different levels of education, particularly at the Secondary stage at which decisions about employment have to be taken by a large majority of students. In England, it is the duty of the Career Master 'to discover the mental make-up, the aptitude, the tastes, — the abilities of each pupil and advise him and his parents as to what his future line of education ought to be. If he shows neither aptitude nor ability for undergoing higher education he is advised to switch over at the end of the middle school stage to another kind of school — technical or craft or arts school where he could be at home and which would lead him to a gainful occupation. And in the High School Stage the Career Master would advise whether he should go for higher literary education or professional education. 'In all progressive countries, Government aims at a wide dissemination of facts concerning various occupations and constantly seeks to establish suitable agencies and techniques which will enable every individual to find employment suited to his inclination, ability and skill. The aptitude-wise (गुणकर्मविभागशः)

arrangement of jobs is practicable only if there is aptitude-wise arrangement of education. De-linking of degree from job may appear to be absurd today, but in the long run it would be very helpful.

For Experts To Decide

At what stage and in which manner the programmes of social service and manual labour as well as the N.C.C. training should be introduced is a matter for the experts to decide. They will have to judge the feasibility and utility of schemes such as the one suggested by the National Discipline Committee years back. (The scheme seeks to introduce an inter-calary educational year after matriculation and before junior college). But it is certain that mobilisation of youth-power for social service is the urgent need of the hour; that it is essential to revive not only the 'dignity of labour' but the basic spirit of 'work is worship', and that elementary military training is indispensable since, as Swatantrayaveer Savarkar put it, शस्त्रेण रक्षिते राष्ट्रे शास्त्र चर्चा प्रवर्तते।

It is, again, for experts to take decision about moral instruction. As Rishi Arabindo says, "But whether distinct teaching in any form of religion is imparted or not, the essence of religion, to live for God, for humanity, for country, for others and for oneself in these, must be made the ideal in every school which calls itself national." (This 'essence of religion' must have been upper most in the mind of General Montgomery when he remarked that the best weapon for the defence of any country is 'religion and fearless elite'.) The progressive Freudians will do well to remember the warning of Dr. J. D. Unwin, "Any human society is free to choose, either to display great energy or to enjoy sexual freedom; the evidence is that it cannot do both for more than one generation." (SEX AND CULTURE).

Whether and at what stage special courses for social workers should be integrated with the regular educational system is again a matter to be decided by experts only. The evolution of a National Social policy, the need for which has been so ably advocated by Mrs. Durgabai Deshmukh,

is certainly the responsibility of the Planning Commission. It is also for the Commission to undertake sample socio-economic surveys of the Scheduled Castes, the Scheduled Tribes, the Denotified Tribes, and other Backward Classes, in different areas, and to suggest ways and means of improving their plight. It is the duty of legislators to enact a separate law giving special facilities to the physically and the mentally hadicapped in terms of training and employment, medical aid, priority and quota in job opportunities, and Government subsidies to their wages. But the main brunt is to be borne by social workers with patience and objectivity, having interest in and sympathy for the physically and the mentally sick and disabled persons. But they must be given special training in such subjects as philosophy and history of social work, Indian social problems, social legislation, medical information, public welfare and community welfare services, basic social work techniques, namely, case work, group work, community organisation, social research, dynamics of human behaviour, adult and child psychia'ry, including psychopathology, crime psychology, treatment of neuroses and psychoses, various behaviour problems and management of the mentally defective; psychosomatic medicine, social and emotional components of illness, care and rehabilitation, case work in psychia'ric settings, child guidance techniques; organisation and administration of psychiatric social service in various settings, Social and Preventive Medicine and medical social work. They have to provide channels of communication between social work and medicine by organising themselves into professional groups under the auspices of organisations like Indian Conference of Social Work, the Association of Alumni of Schools of Social Work, or the Indian Medical Association. They are to act as a liason between the hospital, the patient, his family and the community on the one hand, and doctors, psychiatrists, nurses, occupational therapists, physio-therapists, etc., on the other. It is necessary to organise, with the Government aid, better men'al hospitals, psychiatric out-patient and mental hygiene clinics; 'Day Hospitals'; institutes like 'the School

for Children in Need of Special Care' (Bombay); 'Day Care Centres'; mobile vans for villages carrying trained persons; occupational centres and 'colony system' as in U.K.; child guidance clinics (one to 100,000 people); scientific family welfare services; institutes, 'homes', workshops; schools and training centres for the blind, the deaf, the crippled, the dumb, the aged, the infirm, the disabled, the orthopaedically handicapped, the leper, the allergic, the cardiac, the metabolic, the encephalitic, the epileptic, the paraplegic, the juvenile delinquents, the lunatic, the criminal, the beggars, the destitutes, etc. The Social workers have also to ensure proper implementation of the Children Acts, the Reformatory School Acts and the Borstal Schools Acts.

Probably, a part of such training can be conveniently imparted after the completion of secondary education.

Before entering into discussion about the obligations of higher education it would be appropriate at this stage, to take into consideration a few problems that are common to both — the secondary as well as the higher stage.

Common Problems

While formulating the curricula for vocational training at the secondary stage or professional education at higher level it would be advisable to take a survey of the local and national requirements so as to relate the curricula, as far as possible, to these requirements.

The study of Educational Psychology, which helps the processes of formulation of education objectives, organisation of the learning experience, and evaluation of the learning experience, is valuable at the Secondary as well as the higher stage. But our knowledge should not go only as far back as Swiss educationist Pestalozzi, it must extend upto Patanjali and 'Uvasagadasao', the Jain treatise.

The Radhakrishnan Commission had observed, 'Professional education has failed in one of its large responsibilities, that of developing over-all principles and philosophy by which professional men should live and work — The founda-

tion of professional education should be not only technical skill but also a sense of social responsibility, an appreciation of social and human values and 'relationships.' Obviously, the same holds good regarding vocational training also. This caution has become still more important because of the emergence of new professions.

Serious attention should be paid to the preparation of text-books in Indian languages.

The Radhakrishnan Commission had warned against the over-crowding at educational institutions. Today we are suffering from explosion of enrolement at all levels. In fact, most of the students need personal attention. This has helped considerably the process of aggravation of the current malady afflicting all the institutions.

Almost every Commission had emphasised the need for improving the working conditions, emoluments, service-security, social security, retirement benefits and the social status of the teachers. But nothing substantial has been done so far in this direction. Nor have they been offered the protection of industrial legislation. (In the proposed Industrial Relations Bill I reliably learn that the teaching and the non-teaching staff of educational institutions has been brought within the purview of the Indian Trade Union Act, but the protection of the Industrial Disputes Act has not been extended to them. Instead, the Government is probably thinking of setting up some alternative machinery for the redressal of their grievances and settlement of their disputes.) If the teachers are left no other alternative except agitation for securing their minimum legitimate demands, the entire atmosphere of the educational field is bound to be vitiated. It is no use advising the teachers to refrain from trade unionism so long as objective conditions rendering resort to trade unionism a mere superfluity are not created. Under the present circumstances, they are not likely to carry enthusiasm for improving their performance by learning and practising new teaching methods, such as, for example, the 'research-development-diffusion-adoption'

method. It is, however, commendable that, inspite of this depressing fact, some teachers have recently organised a non-trade-union body, i.e., Bharatiya Shikshan Mandal, for channelising the teachers' energies into constructive, educational work.

Regarding the problem of 'examination reform', the UGC has said, 'We are convinced that if we are to suggest any single reform in university education, it should be that of examinations.' This holds good regarding the entire educational field. While it may not be practicable to abolish all external examinations immediately, there should be a determined effort to replace them progressively by a system of internal and continuous evaluation by the teachers themselves. It is, however, necessary to keep an open mind on this issue, for it is certain that any other alternative system of evaluation is also bound to carry with it its own characteristic defects and deficiencies. (Psychology has now placed at our disposal various standardised tests of achievement, intelligence, etc.) The separation of functions between the curriculum-makers, the actual teachers, and the board of examiners must be generally discouraged. "Those who teach must examine. In this sense examinations must become 'internal', and an integral part of the teaching process". (Examination Reform, A plan for Action, UGC, 1973).

There need not be any rigidity about the re-phasing and reorganisation of different courses also. (About special courses for girl-students, no serious thinking has yet been done. Apart from Home Science, or Nursing, there should be selection of jobs for which women have special aptitude. There can be a more rational distribution of female labour force so as to reduce competition between men and women.)

'If we are to enable even the poorest to obtain not merely some but the best education they are capable of, we must organise a large and generous system of scholarships which will provide a ladder from the bottom to the university along which any child can climb to the limit of

his capacity. These scholarships should cover not only tuition costs but costs of board, lodge and other living needs'.

A crash housing programme in all big educational centres for the benefit of the staff and the students also seems to be necessary in order to facilitate their concentration on work as well as to save them from the evils of over-urbanisation.

All this eventually means that the leaders of the society must accord high priority to education in the national expenditure. The Kothari Commission had opined that the educational expenditure, which increased from Rs. 1,144 millions in 1950-51 to Rs. 6,000 millions in 1965-66, should further rise to Rs. 40,364 millions in 1985-86, and that the proportion of GNP allocated to education should rise from 2.9 percent in 1965-66 to 6.0 percent in 1985-86.

At this stage, it must be emphasised that the autonomy of educational institutions is yet another common problem. The Radhakrishnan Commission says, '....a great many of the present evils arise from the fact that most of our universities have no real autonomy whatever, and have proved incapable of resisting pressure from outside.' No doubt, generous grants from the Government are necessary for meeting the claimant needs of more buildings, more and better-paid staff, more scholarships, more facilities for research, more libraries, more laboratories, with better equipment, more work-shops, etc. But it is also the duty of any civilized Government to provide for such grants. That is no justification for governmental control. The educational field must be allowed to remain uncommitted, — free from all extraneous control, private or governmental. The Kothari Commission remarks, 'It is important to recognise that the case for autonomy of universities rests on the fundamental consideration that, without it, universities cannot discharge effectively their principal functions of teaching, research and service to the community; and that only an autonomous institution, free from regimentation of ideas and pressure of party or power politics, can pursue truth fearlessly and build up, in its teachers and students,

habits of independent thinking and a spirit of enquiry unfettered by the limitations and prejudices of the near and the immediate which is so essential for the development of a free society.' What is true about universities is equally true about all other educational institutions under the universities as well as at lower levels, — be they departments, colleges or schools. They must have full autonomy, including that for the selection of students, the appointment and promotion of teachers, and the determination of courses of study, methods of teaching, and the selection of areas and problems of research. They should be sensitive to enlightened public opinion only. (The current public controversy in Kerala about sec. 68 and 69 of the Kerala University Act is a burning testimony of the havoc that can be played in the educational field by the extraneous influences).

Education should be converted into non-governmental public agency under the proposed National Education Foundation, to be managed by educationists and other experts, and subject only to supervision at the highest level by the Parliament.

In every university, College or other educational institution, autonomous Students' Unions must be formed on the basis of compulsory or automatic membership and direct elections. Joint Councils of Students and Teachers should be set up for mutual consultation on common problems. Students' representatives should be associated with all the decision-making processes of their institutions.

The Crises

James A. Perkins has enumerated several crises of the University : the crisis of numbers, the crisis of finance, the crisis of the relevance of the university curriculum, the crisis of the new priorities, and the crisis of the new scepticism. 'We will not understand the nature of the crisis of governance unless we realise that it is compounded by five crises,' he says. In fact, what he has observed about university is equally true about the entire field of education.

And of all the crises, the 'crisis of the new scepticism' is much more basic — not only in India but all over the world.

Ivan D. Illich, in his "DE-SCHOOLING SOCIETY" questions whether schooling is the same thing as education. "We all learn day by day, and most of us, to be honest, can find little in our lives which schooling has directly and profoundly influenced." According to Everett Reimer, "most countries in the world can only afford to give their children the barest minimum of education, while the costs of schooling are everywhere rising faster than enrolments, and faster than national income. Schools are for most people the institutional props for privilege, and yet at the same time they are the major instruments of social mobility. But at what cost in terms of true learning, true creativity, true democracy? And at what ultimate cost to the societies which perpetuate themselves in this way?' ('School is Dead')

Mr. Perkins has correctly diagnosed, 'when societies are divided, universities have had difficulty in establishing their neutrality, or at least maintaining it; when a society has a substantial consensus on its main priorities, university neutrality becomes the more possible. It is not surprising that the countries that have had the most difficulty with their universities have been those with the deepest divisions in their social philosophies and social programmes.'

Against this background the propriety of Gunnar Myrdal's advice for underdeveloped contries becomes understandable. In 'The challenge of World Poverty' he says, 'What they (the underdeveloped countries) need to do is not simply to add more education to what they are now offering their people but to change in a fundamental way the whole structure, direction and content of their educational system.'

Our Education Commission pleads for 'a revolution in education' and believes that this revolution, if it is really carried out, 'in turn will set in motion the desired social, economic and cultural revolution.' The Commission states :

'We need to bring about major improvement in the

effectiveness of primary education; to introduce work experience as an integral element of general education; to vocationalise secondary education; to improve the quality of teachers at all levels and to provide teachers in sufficient strength; to liquidate illiteracy; to strengthen centres of advanced study and strive to attain, in some of our universities at least, higher international standards; to lay special emphasis on the combination of teaching and research in agriculture and allied sciences. All this calls for determined and large-scale action.'

The Commission also warns that its report 'is not a substitute for action,' and that 'the future of the country depends largely upon what is done about education during the next ten years or so.'

This was written in 1966. During the intervening period there has been no marked improvement in any respect. Lack of academic facilities, overflowing numbers, inadequate library and laboratory facilities, indifferent teachers, the poor student-teacher contact, depressing atmosphere of educational institutions, lack of appropriate job-opportunities and consequent frustration, opportunism and careerism on the part of the so-called leaders, the falling standards of adults in public life, all these factors have combined to aggravate the student unrest — which is to be distinguished from student indiscipline. (Our students are restless but not indisciplined) In April 1974, K. R. Srinivas Iyengar wrote :

Our Massive Invalid

'During the last 75 years, physician after physician — whole colleges of physicians — have felt the pulse of 'Higher Education in India', taken periodic blood-tests, X-ray photographs, E.C. recordings, and have made varied diagnosis and prescribed detailed regimes for promoting recovery. Curzon, Gokhale, Sadler, Hartog, Sargent, Radhakrishnan, C. R. Reddy, Lakshmanaswamy Mudaliar and Kothari are but the more important physicians; for Senate and Academic Council, Legislative Council and Assembly,

and even Parliament, have often sat in conclave bemoaning the patient's health. Imported experts too—with their sophisticated strategies and advertised gifts—have done their best (or worst) with our 'massive invalid', our 'immobile colossus', who somehow refuses to respond to any treatment, simple or complex, indigenous or foreign. Education Ministers and Vice-Chancellors have met, confabulated and passed periphrastic resolutions. The UGC has distributed largesse to colleges and universities and has, besides, produced a museum piece called the Model University Act. The Indian Institute of Advanced Study organized in Mysore in January 1971 a Seminar on the Management and Organisation of Indian Universities, and another on Higher Education, Social change and National Development in November 1972 at Vigyan Bhavan, New Delhi. Conferences, workshops, seminars, task forces have all had their say, and there is no dearth of reports, recommendations and panaceas. Only the patient refuses to respond.' (Swarajya)

It will be doing great injustice to the luminories of Indian educational field to suggest, even indirectly, that they have failed to make appropriate recommendations for the re-organization and re-vitalisation of higher education, — though the approach to this problem must, in the nature of things, be pragmatic, flexible and even subject to the trial-and-error-method.

The real difficulty, it is obvious, has been regarding implementation.

Non-Implementation

For example, the Kothari Commission envisaged that evening colleges and correspondence courses would cover by 1986 a third of the total enrolment to higher education. This would reduce the pressure of full-time courses. In Australia, Japan, Sweden, the USSR and the USA. the technique of correspondence course has proved its efficacy in catering higher education in Engineering, Technology, Social Sciences, Natural Science, Agriculture, Library

Science, Teacher Training, Law, Commerce, etc. In India, only eleven universities are offering correspondence courses with a total enrolment of 50,000. This 'own-time' educational method has not been given full encouragement. The same is the case with the establishment of evening or morning colleges — the 'part-time' method.

The practice-school-method, according to which the student learns how to practise in his profession even before his graduation, under the direct supervision of the academic Faculty, can be worked out for various professions and disciplines. Presently, only a few institutions are implementing this method.

National Councils of at least some of the important professions should have been organised to guide and evaluate university studies in these professions.

The suggestion for establishment of post-graduate centres instead of new universities for augmenting post-graduate and research facilities, deserves implementation.

Since in practical life it becomes necessary to integrate fragments of knowledge from various disciplines, it is advisable that early education should be made broad-based and in higher education integrated teaching of inter-dependent disciplines should be developed.

There is a suggestion for organisation of higher education in two types :

(1) Social education which includes politics, economics, law, administration, sociology, secretariat work, business management and accounting and audit, etc.

(2) Natural sciences which include both pure and applied sciences including engineering, medical and other disciplines. Sri K. Santhanam wants these to be organised in two broad sections : a long course of five or six years' duration and a short one through correspondence.

Shri Udgaonkar envisages new types of 'Science-cum-humanities' course programmes under which a student can choose from amongst a wide variety of courses, some from

the science and some from the humanities areas, a few of which he may study in depth.

No fresh thinking has been brought to bear on this subject, so that higher education in India continues to be truly 'an unlimited non-system.'

It has not yet been explored whether we can follow profitably the latest unconventional innovation of the 'Open University' established at Bletchely in United Kingdom in 1971.

The services of the All India Radio and TV can also be utilised for the purpose. This has not been done.

No systematic plan is evolved for the utillsation of modern educational technology, such as, the use of tapes, records, films, slides, etc.

The examples need not be multiplied. They are illustrative, revealing unmistakably the lack of earnestness on the part of those who are publicly committed to the cause of Education. No wonder if the Draft Fifth Plan states 'The Indian economy, at its present level of development, has neither the resources to expand higher education at the present rate, nor the capacity to absorb all the resulting increase in out-put into employment at wages corresponding to the expectations of those who receive higher education.'

Needless to repeat that what is lacking is not resources but earnestness and correct priorities.

Expectations

Apart from educationists, our socio-cultural leaders have also expressed their expectations about higher education.

In particular, they want the higher education to conduct unbiased research in the past of Bharatvarsha, — its history, culture and cultural intercourse, literatures, languages and dialects, sociology, social anthrapology, social philosophies and socio-economic orders, psychology and yoga, religions and spiritual disciplines, medicine, ecology,

engineering, architecture, town-planning, crafts, industries, commerce, communication, navigation, agriculture, forestry, fishery, public administration, political science, geo-politics, science of war, sculpture, painting, music, dance, drama, folk-lores, folk-songs, etc.

Balanced, Integrated Approach

In the scheme of higher education imbalances should not be allowed to develop. Social sciences and Humanities must be accorded the status superior to that of Natural Sciences and Technology, if we do not intend to inaugurate what Dr. Radhakrishnan describes as 'Rakshas-Raj'. Inter-disciplinary approach must be encouraged. Recently, Dr. Sethna has said, 'Educational institutions like the IIT should bridge the gap between the culture of science and technology, and the culture of arts and letters, not by offering more courses in arts and culture but by integrating the disciplines. The products of these institutions should be 'whole' integrated personalities with no conflict between the outer world of fact and the inner world of feeling and perception.' The approach must be balanced and integrated.

Long Range View

(Similarly, we must have a long-range view of our national requirements in future and make a modest beginning to equip ourselves for them in the long run. For example, Shri Guruji envisaged that in the not-every-distant future we will be in need of scholars specialised in different languages and dialects in the world.)

The need to pay special attention to Science and Research can hardly be over-emphasised.

Science and Technology

Our per capita expenditure on education and research is one of the lowest in the world. According to the Education Commission "our expenditure on R and D is 0.3 per cent of the GNP. The total strength of scientists and engineers is only a few hundredths of one per cent of the labour force. The number of qualified scientists and engineers is of the order of a hundred thousand." The research effort in

our country is far smaller as compared to our total national requirements and also our potentialities. We do not know when we would reach a stage when every university teacher would become a researcher and every researcher a teacher. But one thing is certain. We must give special encouragement to teachers, research workers, students, precision mechanics, laboratory technicians and highly skilled workers, to advance in this direction; and we must have throughout the country, a network of 'dynamic' libraries and standard laboratories improved in buildings, fittings, equipment, workshops and technicians. At least in a few selected centres, we should be able to reach standards that can stand international comparison. The Kothari Commission had recommended that "by the end of the decade, something like a quarter of the total university expenditure should be devoted to research". We have to bring science and technology closer together. (Evolution of a scientific terminology in Indian languages is also a must). Great emphasis should be laid upon the advance in not only pure (basic) research, but also in applied research and development research. Allocation of more funds for the development of science in general and research work in particular; provision of foreign exchange for this purpose; organisation of the system of visiting professorships on contract appointments and also that of research fellowships for study and research abroad; extension of appropriate research facilities so as to stop the brain-drain of patriotic research scientists; continuous search for and development of science talent; co-ordination between different science and research institutions, universities, industries and professional societies; integration of the efforts of scientists, technologists, social scientists, economists, engineers, science administrators, experts in industrial management, etc., special attention to the development of so-far-comparatively-neglected sciences, such as, astronomy, astrophysics, electronics and instrumentation, pedagogical sciences, experimental physics and chemistry, etc. deliberate efforts to place India on the 'world map of mathematics', introduction of new sciences, such as, cybernetics,

evolution of a balanced and dynamic National Science Policy and National Research Policy, determining priorities for research in the light of our own national needs, without being unduly influenced by the current fashion in science — these, among other things, are some of the measures that can brook no delay.

All these considerations lead us to the inevitable conclusion that an Advanced Centre for Studies in Educational Planning, Administration and Finance must be set up immediately.

It is further necessary to co-relate all these attainments in the field of education to the immediate practical requirements of national development. The importance of education for economic growth has not been sufficiently recognised in our country.

With this end in view, it is essential to progressively vocationalise secondary education and incorporate technology oriented work-experience as an integral part of all education. It is further necessary to rationally and comprehensively re-organise the work of technical schools, polytechnics, I.T.Is., apprenticeship schools started by public sector undertakings, vocational and technical courses through correspondence, various examinations by professional societies, special part-time day-release and sandwich or short-intensive courses, workshops, new courses in commercial, scientific and industrial trades, in-service training courses of private and public enterprises, workers' education schemes, courses in industrial management, higher courses in agriculture, integrating teaching, research and extension, primary extension centre courses in rural areas, agricultural polytechnics and junior agricultural schools to be newly started, and all other similar activities and institutions.

In the industrial field our workers expect universities to conduct purposeful and need-oriented research in industrial problems, such as strikes, lock-outs, absenteeism, industrial psychology, motivation of work, team-work, incen-

tive schemes, leadership (organisational and industrial), wage behaviour, discipline, role of State in industrial relations, productivity, nature and content of social security, forecasting of future technical skills and employment position, development of case law, working conditions and safety, labour quality and methods of recruitment, promotion and training etc. and examine relevance of institutional constitutions and practices as fulfilling the aim of life.

It is also their duty to assist in statistical researches like capital-output ratios, research-development ratios and sociological researches like family living surveys, communication patterns, etc., with a view to evolve enlightened plans and policies in this regard; to maintain a continuous dialogue with industry and trade unions to find out current and long-term educational needs of industrial life and keep Industry and Labour apprised of up-to-date advances in information, knowledge and research; to carry on research of impact of technology on culture and help their re-orientation to each other; and, apart from general research, to conduct special research in Pre-determined Motion Time Studies (PMTS), Method Time Measurement (MTM) etc. and the techniques of operational research, in the light of the Indian conditions and requirements.

The Kothari Commission has recommended that in post-graduate studies and research, the standards of attainment must bear international comparison. It is true that our national science policy should be guided by our national requirements rather than by the current fashion in the West; that the scientific and technological knowledge gets universalised sooner rather than later; that India is not lacking in genius in this field as is demonstrated by the spectacular attainments of — to cite just two examples — Shri Khorana and Jayant Naralikar; and that even in the West the thinkers are veering round to the view that the "technical know-what" should guide and restrain the "technical know-how" through some Technological Ombudsman that should be authorised to decide what scientific inv-

entions and technological innovations should be welcomed and what others rejected — keeping in view the larger interests of the mankind. (The "technical know-how" conveys us **how** to achieve the given purposes; the "technical know-what" defines what **purposes** are to be achieved.) Nevertheless, we have to keep ourselves apprised of the latest developments and their impact on socio-economic structure. With the advance of science and technology the comparative power position within the developed societies is changing unmistakeably. Today, in the industrial society dominated by the manufacturing goods-producing-industries, the strategic position is being occupied by semi-skilled workers and engineers. But Daniel Bell has come to conclude that the "post-industrial society" will be dominated by the "service-industries" and the "knowledge industries". The "knowledge classes", such as, scientists, technologists, professionals and highly skilled workers will occupy the strategic position in the post-industrial society. During that period, the ownership of knowledge will be valued much more than the ownership of the lifeless, mechanical means of production. What machinery is today, knowledge will be tomorrow. If Marxist terminology is to be used, in the post-industrial era, the "Educational haves" will enjoy a privileged position as compared to the "educational have-nots". We will have to watch the repercussions of the Second Industrial Revolution in the West so that we may benefit by their experience and adjust the process in the light of our traditions, conditions and aspirations.

The Brain Drain

In the meanwhile, effective steps must be taken to stop the 'brain-drain'. For this purpose, it is necessary to evolve a co-ordinated system of age-differentials and status-differentials which would ensure reconciliation of equality with incentive, in view of the fact that if values of life are purely economic or materialistic, equitable distribution of wealth would remain incompatible with incentive-for highest individual development. This would generate the

psychological and cultural environment in which there would invariably be an inverse ratio between social status and personal wealth. (In a survey in the United States it was found that workers of the "knowledge classes" aspire for social status as well as monetary gains). This is an uphill task. It can be accomplished only by the socio-cultural leaders. But in the absence of such a change in the values of life, it is impossible to stop the 'braindrain' or even to consolidate the gains of education for the national cause. Educationists alone cannot be expected to fulfil this requirement. Probably, this is one of the reasons why an eminent educationist has been led to remark that education is too serious a matter to be left to the educators.

In Political Field

Outside the academic world, the field in most urgent need of 'basic' research is political. The inadequacy of the present system is now being progressively realised. Various devices, such as, the right to recall, the right to initiate, plebiscite, referendum, proportional representation, list system, etc., are being proposed. But the gap between the genuine democratic government and the representative government cannot be full, bridged over so long as the State and the Society do not become co-terminus. Will introduction of "functional representation" help the process? How can we reconcile complete decentralisation with the unitary character of our nation? The present system is not the product of the soil; it has no roots in the soil. It is just the transplantation — not an organic growth. Mere patch-work here and there would be of no use. Our experts will have to conduct some basic thinking and research on the entire problem and evolve a new system consistent with our national genius and culture — in the light of the various experiments in the world. This is the responsibility of the Research Scholars, since politicians themselves can hardly find any leisure to undertake such a research.

In popular mind, developmental planning is identified with economic planning, though a few thinkers in the west

are wondering why there should be no compilation of the indices of social progress and happiness even as we are having economic indices to-day.

The Present Plight

Our economy is already heading towards the worst crisis. Like Abhimanyu, it is confronted on all sides with apparently insoluble problems. Unemployment and under-employment, inflation, shortages and recession, hoarding, black-marketing, profiteering, smuggling, tax evasion, corruption, and consequent enormous growth in black-money, exhorbitant administrative expenditure, huge deficit financing, failure of nationalised banks to achieve their professed objectives, inefficiency of the public sector, under-utilisation of installed capacity, reliance upon unsuitable technology, ignorance of the peculiarly Indian "Saving-investment" mechanism, defective policies of industrial licensing and import licensing, wrong policies of export, import, and import substitution, ever-shrinking foreign exchange, a boost up to wrong patterns of production and consumption, reluctance to nationalise foreign banks and Indianise foreign-owned industries, restrictive clauses in the foreign collaboration agreements, alarming rise in foreign debts, the stranglehold of the rural rich, the big business and the monopoly houses, relaxation of restraints on penetration of multi-national corporations, erosion of real wage and wage freeze, and progressive pauperisation of the masses.

The politicisation of Indian planning is already a notorious fact. At the formulation stage, the plan is intended to serve the purpose of an Election Manifesto; at the implementation stage, it becomes a mechanism for distribution of spoils. The planning process is thoroughly dominated by politicians, economists have to play the second fiddle. Thus it becomes an instrument for 'political' rather than economic development.

And all this at a time when planning has become a trying job for economists all over the world.

During recent years, the world's foreign exchange markets have been subject to one shock after another. The 126 members of the International Monetary Fund (I M F) decided on January 16 to abolish the official price of gold. The decision of the IMF to scrap its gold connection opens out a period of great international financial insecurity. As Shri. S. E. Sarkar points out, "The present world monetary crisis itself can be traced to the time of the de-linking of the US dollar from gold in August 1971". Production is becoming international. Labour mobility is increased. A progressive internationalisation of banking operations is helping the growth of multi-national corporations. As Margaret G. de Vries put it, "Markets not only for goods but for capital, business enterprises, and even labour now exceed the span of national control. As a result, economic decision-makers have a great deal less freedom than previously in the formulation of national economic policies" This is true not only for exchange rate and trade policies affecting the external sector of economies but also for internal policies affecting interest rates, credit expansion, domestic investment and employment, government taxation and expenditures, or the newer incomes policies. "Academic economists are re-examining their traditional theories of international trade, exchange rate determination, and balance of payments equilibrium. ..... The new world has made it much more difficult for central bankers and economic policy-makers ..... to achieve the four principal objectives of economic policy ..... (i.e.) full employment, price stability, economic growth, and balance of payments equilibrium". The tools for planning are also, to a considerable extent, not available.

For example, an exploration of policies to improve income distribution in developing countries in the context of economic growth was conducted jointly by the World Bank's Development Research Centre and the Institute of Development Studies at Sussex University, England. The authors of the study, Hollis chenery, Montek S. Ahluwalia, C. L. G. Bell, John H. Duloy, and Richard Jolly, have noted in their 'Redistribution with Growth' that comprehensive

data on the distribution of productive wealth are not available for any under-developed country, that we need better information on the employment status of poverty groups in terms of broad categories such as 'employer', employee', self-employed', unemployed', and so forth, that there is a need for detailed 'profiles of poverty' highlighting the economic characteristics of poverty groups, that the determinants of income-distribution need to be analysed, that we are far-from having a comprehensive, a fully developed theory of the size distribution of income, and that the time series data on the distribution of income are not available. This is just to illustrate the poverty of the tools of planning.

To cite another example, there is a well-known principle that the amount of economic activity-determined by total spending, saving, and investment — must be managed by Government for the benefit of the nation as a whole'. Robert S. McNamara, President of the World Bank, said recently that a "Shift in the patterns of public expenditures represents one of the most effective techniques a government possesses to improve the condition of the poor" But there has been no research on or critical review of the distributional effects of governmental expenditure in developing countries. On the topic of the distributional impact of specific government policies, there are severe statistical and conceptual limitations. No generally accepted method exists to determine who are the beneficiaries of the governmental expenditure.

The Fight Against Bias In Economic Science

Stating that "economic research has an influence on the development of the policy choices being made in under-developed as well as developed Countries", Shri Gunnar Myrdal in his "A world Anti-poverty Programme in Out line" pleads for a purge of bias from economic research. Research, when not purged from bias, becomes opportunistic. He has pointed out various defects in scientific approaches which cannot be defended by any economist.

His judgement of 'lack of stringency and circumspection' applies to the tendency to restrict the analysis to 'economic' factors, and to disregard other factors, to the misuse of concepts which, though useful in the analysis of the Western ecnomies, are largely inadequate to the economic realities in underdeveloped countries, — for example, 'unemployment' and 'underemployment', and also to the use of aggregates and market terms with reference to national economies where for the large part markets either do not exist or are highly imperfect. To this corresponds an inadmissable carelessness in the use of statistics, for instance, those relating to the national product or income, without scrutinizing either how the terms are defined in underdeveloped countries or the observational basis for their calculation. This negligence serves the purpose of the tendency to bias, as otherwise it would not be possible to use the figures in the way they are commonly used. Much more generally, Shri Myrdal remarks, the statistical observations and compilations are made with the use of categories which are in appropriate to the conditions in underdeveloped countries. As a result, the statistical figures become grossly misleading and often meaningless. The faults in statistics generally follow an opportunistically biased line. He stresses the need for well trained persons who have substantive knowledge about conditions in under-developed countries and the critical abitity to formulate questions about the material that are adequate to social reality in these countries. He stands for 'the fight against bias in economic science'.

In India, even after two decades of planning, we are not having with us reliable statistics in regard to poverty, the nature and extent of unemployment and underemployment, inequalities in income and wealth, wholesale and retail trade, small scale industries, road and water transport, the unorganised sector, the raw material endowments, or the national waste. One wonders how our planners proceeded with the process without first building up a viable information system based on reliable data.

Integration

So far as the integration of educational planning with developmental planning is concerned, there has been no attempt so far to collect the relevant information. For example, due De Wulf informs us that the detailed study of expenditure benefits, carried out by the World Bank on the educational sector in Colombia revealed that the public financing of education in Colombia contributed to the re-distribution of income from the rich to the poor. The redistributive effect resulted entirely from the public financing of primary education. Public financing of secondary and higher education actually benefited the rich more than the poor. The 'Re-distribution with Growth' observes that the impact of education on income inequality cannot be determined independently of whether the structural characteristics of the economy are such as to encourage the absorption of skilled labour into highwage employment Broad cross — country comparisons can hardly capture the complex nature of these interactions.

Be it as it may but the fact remains that this aspect has not been looked into by our planners. For their thinking 'is compartmentalised, while integrated thinking on ethics, education, economics, ecology, etc. is necessary for correct planning.

Unscientific : Unrealistic

Our experience so far indicated unmistakably that our developmental planning has been unscientific and unrealistic.

Begin From The Beginning

If we are earnest about developmental planning it is obvious that we will have to start the entire process afresh, depoliticising it and entrusting it to unorthodox experts-including educationists. We will have to learn much-and unlearn still much more. We must be courageous enough to begin from the begining. पुनश्च हरिः ॐ।

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