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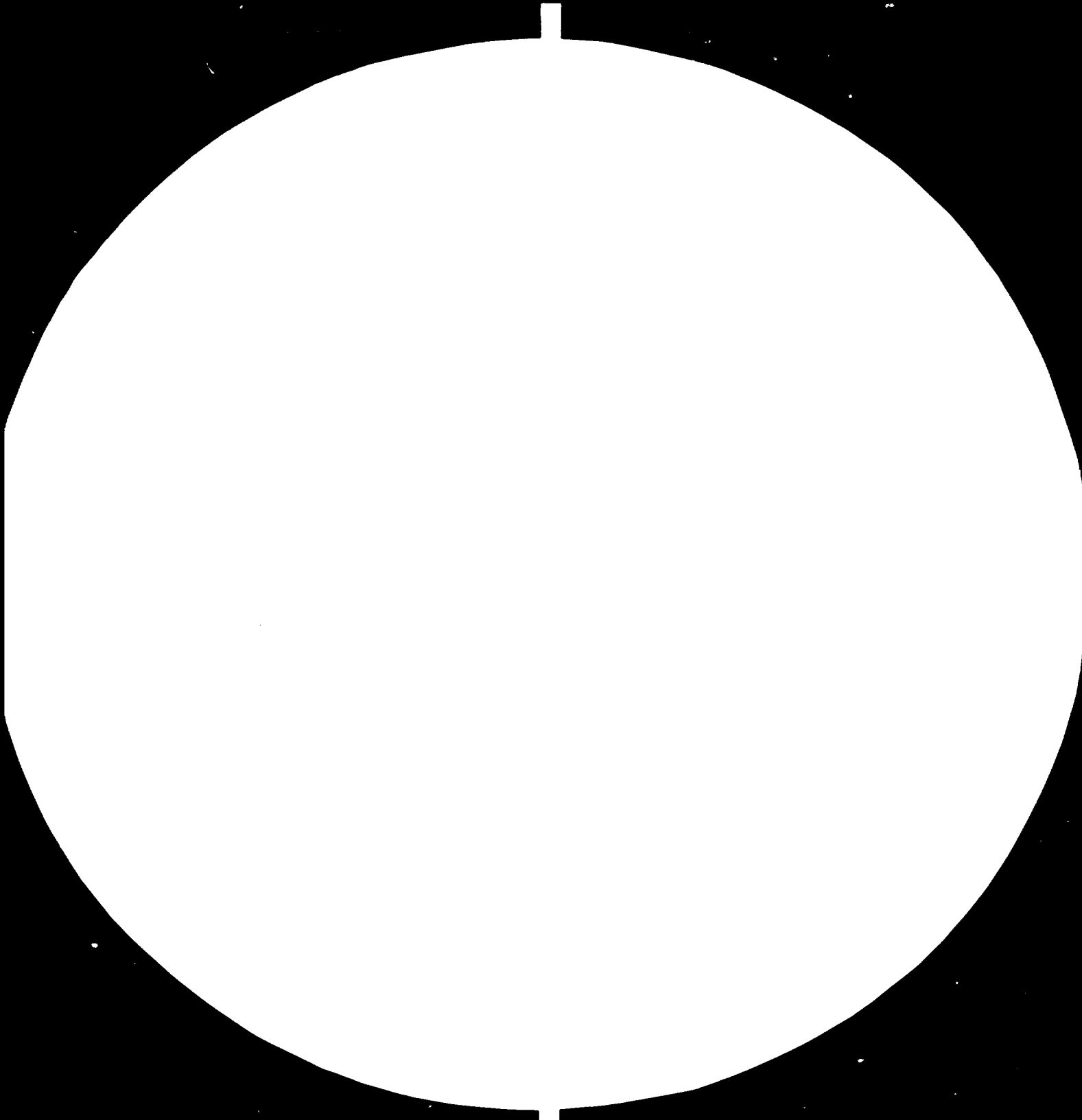

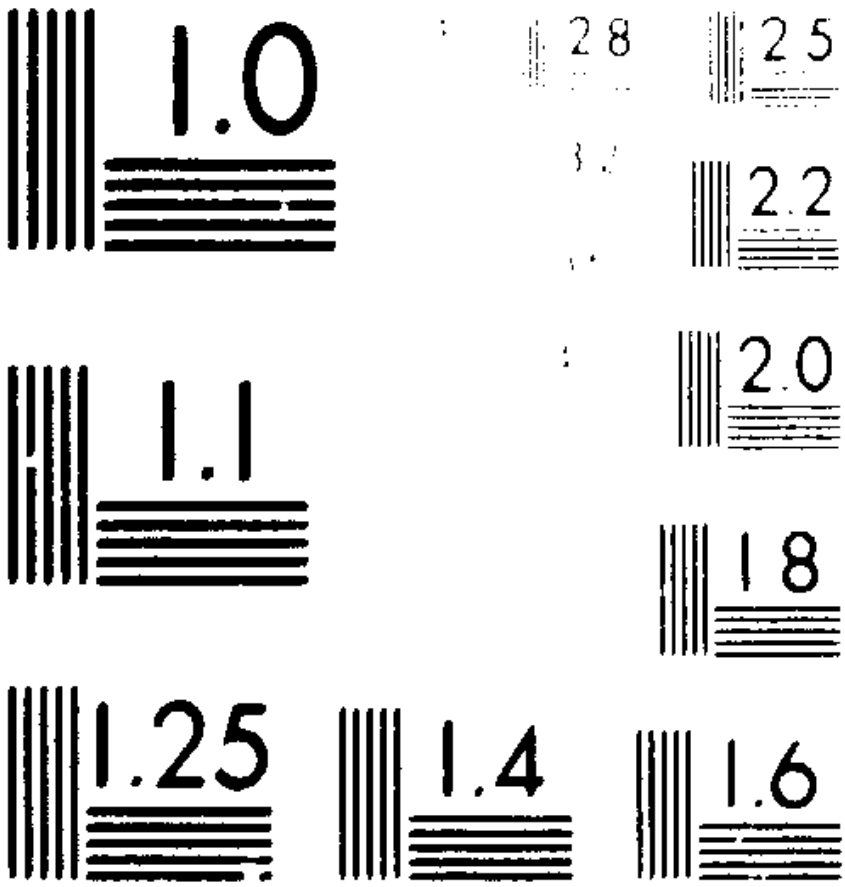
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December, 1981

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Assistance to the Bangladesh Jute Research Institute (Technology) Bangladesh

BGD/75/013/D/01/37

Bangladesh. Jute Products Research

TECHNICAL REPORT

prepared for the Government of Bangladesh

by

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Expert of the United Nations Industrial Development Organization acting as Executive Agency for the United Nations Development Programme

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This report has not been cleared with the United Nations Industrial Development Organization which does not, therefore necessarily share the views presented.

C O N T E N T S

Summary

1. Initial allocation of training fellowships has been taken up and 125 man-months shared amongst 17 persons. Section 3

2. Laboratory and trial production facilities for Chemical Technology and Mechanical Processing have been installed at a cost of about 700,000 dollars. Section 4

3. Bidding for the supply of additional laboratory equipment is in hand. Section 4

4. The Annual Programme of Research for 1981 was presented in a new format, with the detailed projects grouped under nine Objectives. Section 5

5. The Annual Technical Reports of BJRI (Tech) for 1980, together with the Half-Yearly Technical Reports for 1981, provide a detailed account of the research work undertaken, and of the results detained. Section 6

6. The Tripartite Review Meeting of December 1981 recommended

   (i) that the duration of the Project be extended by 18 months,

   (ii) that additional training fellowships be provided, and

   (iii) that further machinery for chemical technology and mechanical processing be procured. Section 7

7. An officer from BJRI (Tech) has visited jute machinery makers in Europe to identify machinery suitable for low count spinning. His findings will be evaluated later. Section 8

8. A consultant in chemical technology is spending 3 months at BJRI (Tech), from mid-November 1981 to mid-February 1982. At the conclusion of this mission the consultant will prepare a report setting out what has been accomplished, and suggesting how the work might be developed further. Section 9

9. Three consultants are to be sought, each for 3 months, in the fields of Microbiology, Chemistry of Lignin, and Physical Textile Technology respectively. Section 9

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10. A consultant is sought who will advise on the construction and design of jute fabrics, especially after "wollenising", which will be attractive in Europe for textile purposes. Appropriate samples prepared with the trial production facilities will then be sent to Europe for market assessment. Section 9

11. Liaison between BJRI (Tech) and BJMC is developing will, but discussion is still needed to establish the technical needs of the manufacturing industry as a whole, and to integrate these into the Research Programme. Section 10

12. The 1982 Programme of Research has a format based on a series of broad Objectives, which are now positively stated and show the purpose of the work under each Objective. Section 11

13. The 1982 Programme of Research is soundly based, with an emphasis on both the quality of jute products, and the need to keep down the cost of production. Section 11

14. The present Project, Jute Products Research, is scheduled to terminate in September 1982, but it is unlikely that the planned inputs will all have been implemented by that date. The planned outputs, which already exist in a formal sense, need to be developed and strengthened, and additional time after September 1982 will be needed for this purpose. In these circumstances an extension of the project duration by 2 more years might be considered. Section 12

15. It is timely to consider more closely the role which BJRI (Tech) can play in the long term development of the Bangladesh jute manufacturing industry. There is a need for a clearly defined view of how the research work should develop during the years ahead, and it is desirable that all sections of the jute industry should contribute to the discussion. Section 13

1. Introduction

This Project at the Bangladesh Jute Research Institute (Technology), which comes within the United Nations Development Programme for Bangladesh, has the aim of providing assistance to develop the capability of BJRI (Tech) for technological research and development work related to jute products.

The Project was established in 1978, following a Preparatory Mission in 1977, and the details are set out in the UNDP Project Document Number BGD/75/013/D/01/37, titled Jute Products Research.

The background to the Project is set out in the Document, and in the Terminal Report of the Preparatory Mission. It requires no further discussion here.

The Jute Technologist has submitted three previous Technical Reports, dated December 1978, December 1979, and December 1980. The present Technical Report thus provides an opportunity to review the progress made, and to consider where future developments at BJRI (Tech) may lie.

Official Arrangements

The administrative details of the present Project are as follows:-

Title	:	Jute Products Research
Number	:	BGD/75/013/D/01/37
Date of Approval	:	19 September 1978
Starting Date	:	Estimated May 1978 Actual October 1978
Duration of Project	:	2 years and 6 months
Revised	:	4 years
Termination Date	:	March 1981

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Revised	:	September 1982
Executing Agency	:	U.N.I.D.O
UNDP Input	:	1,435,025 dollars
Revised August 1980	:	1,596,818 dollars
Revised	:	2,152,386 dollars

2. Project Personnel

The Project Personnel have remained unchanged. The Project Administrator has resided in Dacca since taking up post in March 1979, and will continue for the duration of the Project. He has assisted the Director of BJRI (Tech) to implement the activities of the Project, and has presented two six-monthly progress reports during 1981, dated March and September respectively.

The Jute Technologist has made one visit during 1981, commencing on 20 September and extending to 18 December. Including Preparatory Assistance, his visits to BJRI (Tech) now total 17 months.

3. Training Fellowships

In 1980, 17 members of the Scientific Officer staff of BJRI (Tech) took up training fellowships abroad. Three of these, each for 12 months, were at the University of Manchester Institute of Science and Technology (UMIST), one for training in weaving technology and two for training in bleaching, dyeing, and textile printing. A fourth fellowship, for 12 months, provided training in spinning technology, at the University of Leeds.

The remaining 13 fellowships were taken up at the University of Strathclyde, with a specially designed group course providing training in different aspects of textile technology and ancillary subjects. This course was of 6 months duration, and in total the 17 fellowships have taken up the allocation of 125 man-months made in the Project Document.

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All these fellowships except one have now terminated, and the holders have returned to BJRI (Tech). It is regretted that death of one fellowship holder took place suddenly, shortly after his return from the group course.

In the case of one Fellow at UHIST, training in bleaching and dyeing, it was strongly recommended by his Supervisor that the fellowship be extended for a further 12 months, to allow him time to complete the practical work with jute on which he is engaged.

Discussion with the individuals who have returned from training has brought out that in general the experience has been rewarding. The training course have covered a wide range of topics, and much new knowledge, as well as a wider outlook, has been brought into the Institute as a result. Many of the fellows have realised the need for new programmes, perhaps with a greater technical content, and the Programme of Research for 1982 will, it is hoped, reflect these views.

4. Laboratory and Trial Production Facilities

The first phase in the provision of laboratory and trial production facilities has been completed with the installation and commissioning of the following items of equipment:

Chemical Technology

Yarn Mercerizing Machine
Dryer for Packages and Hanks
Automatic Closed Jigger, 54 inch
Three-Bowl Padding Mangle, 54 inch
Washing Machine, 54 inch
Stenter Heat Setting Machine, 54 inch
Laboratory Jigger
Laboratory Pin Stenter

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Mechanical Processing

Flyer Twisting Frame
Precision Spool Winder
Stationary Weft Textile Loom

The total cost of the installed equipment is approximately 700,000 dollars.

It will be appreciated that in chemical technology particularly, a wide range of standard machines are used throughout the different branches of the textile industry. The particular selection of machines listed was made with the object of providing basic needs for research and demonstration purposes, but although reasonably comprehensive it is not necessarily exhaustive. The commissioning of the machines was inaugurated by the State Minister for Science and Technology.

The second phase in the provision of laboratory equipment is now in hand. This is concerned with those items which were less easily identified in the earlier stages of the project, but the need for which has now become clear. A list of appropriate items has been completed, and bidding for the supply of these is in progress. It is expected that evaluation of those bids will be made during January 1982, and, if successful, this timing should allow delivery to be made before September 1982.

5. Annual Programme of Research

The Programme of Research for 1981 has been presented in a new format. Instead of the customary divisions into departments, the detailed projects were grouped under nine Objectives:

Objective 1 : To improve the technical quality of jute fibre as extracted from the plant.

Objective 2 : To reduce the manufacturing costs of jute products by making better use of available materials and machinery.

Objective 3 : To predict the strength characteristics of jute yarn from the physical properties of the fibres from which the yarn is spun, and to relate to the commercial grades of fibre.

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Objective 4 : To examine the physical characteristics of industrial jute products, and to develop new products with improved constructions to enhance export potential.

Objective 5 : To develop methods of bleaching, dyeing and printing jute products which will give good permanence of colors and mitigate photo chemical color changes in jute.

Objective 6 : To change the chemical and physical characteristics of jute by chemical means, and to assess how these changes can be used to improve the market potential of jute.

Objective 7 : To improve the resistance of jute products to environmental deterioration through exposure to light, heat, flame, and micro-organisms.

Objective 8 : Specific product development and technical services.

Objective 9 : Miscellaneous.

This system groups together projects which have a common thread running through them, but which may be done in different departments. This is advantageous, for the reader can now see immediately what effort is being put out on these various objectives, and, perhaps more importantly, the type of work being done.

The objectives themselves, although covering the range of work being carried out, are not necessarily the most appropriate, and improvements can be made as the situation warrants. In preparation for the Programme of Research for 1982, the Director arranged a number of discussion meetings at which the projects coming under a particular objective were discussed by the group of scientists responsible for the work. These discussions were most informative, and, as well as providing opportunities for an exchange of views, brought out some of the difficulties which arise when coordinating work of several departments.

6. Progress Reports

The Annual Technical Reports of BJRI (Tech) for the year 1980 were presented in February 1981. This volume contains technical reports on the projects being studied during 1980, and brings together a great deal of scientific and

technical information. In addition to the reports, there is a summary giving the main points of the work within each department, and some of the appraisal reports presented by the Jute Technologist are also included.

The Half-Yearly Technical Reports of BJRI (Tech) were presented in September 1981. Following the example of the Programme of Research, these reports are collected together under the Objective headings, and thus have a different format from previous Half-Yearly reports. Technical comments on the work reported have been prepared, and these are given in the attached document. The comments need not be repeated here.

Several of the projects listed in the Programme of Research are divided into a number of sections, usually with different officers responsible for different sections. The total number of projects and sub-projects included in the Half-Yearly Reports is 57, but of these 19 did not have reports submitted. This is not unexpected, in view of the number of officers absent on training abroad, but as these have now returned, there should be a full complement of reports available for the Annual Reports issued early in 1982.

The presentation of these technical reports could be improved, with advantage to the reader. Many projects generate a quantity of numerical data, which is usually presented in full, often with no attempt made to manipulate it to bring out the important facts. Unless this is done, the work loses a lot of its purpose, and may, indeed, result in the data being ignored.

It has been commented before that the work content of projects varies greatly from one to another, with some projects being of a continuing nature involving considerable research work, whilst others are much less time consuming. The reports give little indication of the man-hours involved in particular projects, and this makes it difficult to judge whether the total output of research results is appropriate to the number of officers and supporting staff involved.

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The reports also show that projects initiated in one department are having to rely more and more on the assistance and services of other departments. This is most apparent is those projects which modify fibres by chemical treatment or in other ways, for these usually then require the assistance of the spinning department to produce yarn, and the assistance of the testing department to assess the yarn properties. Other examples arise, such as the need for dyed products from the Dyeing and Finishing Departments to be assessed for fading by means of the xenotest machine housed in the physics department. Good coordination between the departments concerned is essential, otherwise bottle-necks will arise.

Moreover, it is evident from comments made in the reports that the scientists engaged on many projects do not appreciate the real purpose of their work. This is unfortunate, for the knowledge that his work will find an industrial use may well serve as added motivation to the scientist. More discussion is one way in which this problem can be overcome.

7. Tripartite Review Meeting

A tripartite review meeting to discuss the progress of the project was held on 9 December 1980. Arising out of this meeting came a proposal that the duration of the Project be extended by 18 months, with a termination date of September 1982 instead of March 1981, to allow additional time for the inputs and outputs to be properly completed.

In addition, it was requested by Government that further training fellowships totalling 50 m/m be provided, in the fields of (1) carpet testing and assessment of performance standards, (2) furnishing fabrics and performance standards, (3) maintenance of chemical and physical instruments,(4) wash fastness of textiles,(5) textile printing,(6) fire proofing and performance standards.

Government also requested that three additional machines be provided under the Project, namely a 3-bowl calender and a fabric mercerising machine to complete the equipment for Chemical Technology, and a Sectional Warping

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Machine for Mechanical Processing. The cost of these machines was estimated at 220,000 dollars.

8. Study Tours

A provision of 15 man months was made for Study Tours by senior members of staff, and of this amount 6.5 man months was consumed during 1979/1980, with reports being submitted by the 4 persons concerned.

In connection with the fine spinning project, an officer from the Spinning Department of BJRI (Tech) has recently returned from visiting 3 textile machinery makers in Europe, each of whom has a potentially interesting spinning frame to offer. As the technology in these cases is different from the usual jute spinning technology, the object was to spend time at each factory to learn the operation of the machine, and to prepare samples of low count yarn for later study at BJRI (Tech). The report on these visits is rather specialized, but contains a great deal of useful information. The outcome as far as fine spinning is concerned will be considered separately.

The tour extended from 5 October to 4 December 1981, and thus brings the total man months consumed so far by Study tours to 8.5, leaving 6.5 man months in hand.

Three other proposals for Study tours are being considered, which, if implemented, will use up these remaining man months. In view of the time normally required to arrange tours, it may not prove possible to implement all three in the remaining 9 months of the project, especially as in these cases working visits to several institutions are planned.

9. Consultants

A provision of 14 m/m was made for consultants to visit BJRI (Tech) and offer guidance in the implementation of various sections of the Research Programme. The view was taken that the services of consultants should not be obtained until all members of staff concerned, who were abroad for training, had returned.

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With the installation of the Chemical Technology and trial production facilities, it was thought timely to engage a consultant for this area of work. An expert with wide knowledge of both the research aspects and production aspects of bleaching, dyeing, and printing of a wide range of fibres, as well as familiarity with other technical process, was sought, and a mission of 3 months, from mid-November 1981 to mid-February 1982 is currently being undertaken. A work plan for the implementation of the research programme is being prepared, and assistance will be given in the practical implementation of this. At the conclusion of mission, the Consultant will prepare a report setting out what has been accomplished, and suggesting how the work might be further developed in the future.

The need for other consultants is now under consideration, and present plans are that 3 persons should be sought, each for 3 months, to work in the field of (1) Microbiology, (2) the Chemistry of Lignin, and (3) Physical Textile Technology. The consultants will advise on the work programmes relating to the improvement of jute cuttings, the alleviation of problems associated with "yellowing" of jute, and the relationship between fibre and yarn characteristics on different spinning systems. Job descriptions for these 3 consultants should be available shortly.

It has been suggested that the remaining 2 m/m of the allocation for Consultants should be filled by a European interior designer. The purpose of this would be to seek advice on the construction and design of jute fabrics, especially after "woolenising", which would be attractive in Europe for textile purposes such as wall coverings, draperies, other furnishing fabrics and so on. If, as a result, a number of approved samples was prepared using the trial production facilities, these could be sent to a suitable organisation in Europe for market assessment, drawing on the Sub-Contract component of the project budget for whatever cost might be involved. A job description for the required Consultant is being prepared in conjunction with UNIDO which has previous experience of this kind of exercise.

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It is always difficult to predict how long it will take for a Consultant to be recruited, and actually commence work. If the job descriptions are circulated early in 1982, there is a good chance that all 4 missions could be completed within 9 months. But, it may be difficult to fit together Consultants visits, and Study tours, so as to ensure that key personnel are available at BJRI (Tech) when required.

10. Liaison with Industry

A main output of this project is a close coordination of activities between BJRI (Tech) and the jute manufacturing Corporation, BJMC. To achieve this, regular meetings are held between representatives of both parties, under the chairmanship of the Executive Director of BJRI, at which the Corporation's problems are discussed. Action is then taken by BJRI (Tech) to investigate appropriate problems, and to report their findings to subsequent meetings.

At present, attention is directed mainly towards problems dealing with the raw materials of the industry, such as improvement of cuttings, reduction of batching oil usage, and alternative types of sizing materials. Whilst these matters have a most important influence on the economics of jute spinning and weaving, the other major problems of improving yarn and fabric quality, and making products more attractive to overseas buyers, still await discussion.

It is sometimes overlooked that the purpose of a manufacturing industry is to make products, which are suited to the use to which they will be put. This requires yarns to be spun which have clearly stated characteristics, and this automatically restricts the batch quality which can be used. Whilst the necessary batch quality should, of course, be achieved at the lowest cost, too much attention paid to economy may reduce the quality standards too much.

Also overlooked is the fact that because the industry's problems begin in the mill, it is to the mill that the research worker should go to study the problems at first hand. This does not make their solution any easier, but it gives more purpose to the work undertaken in the laboratories.

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Thus, whilst the collaboration between BJRI (Tech) and BJMC is developing very well, further discussion is required to establish the technical needs of the industry as a whole, and to integrate these into the Research Programme.

11. 1982 Research Programme

The 1982 Programme of Research for BJRI (Tech) will be presented to the Technological Research Committee for comment and endorsement in January 1982. The contents have been the subject of much internal discussion, with attention focussed more sharply on industrial applications than has hitherto been the case. The format is again based on a series of broad Objectives, but the wording of these has been made more positive, and the number of Objectives increased from 9 to 10.

It would be out of place to discuss the details of the programme in this report, but a brief consideration of the Objectives will give an overall view of the range of work and fields of application. Thus:-

Objective 1 : To improve the technical quality of long jute.

Objective 2 : To reduce the manufacturing costs of jute products by making better use of cuttings and auxiliary materials.

Objective 3 : To study the machine factors which affect the quality of jute yarn, and which are related to the efficiency of spinning and weaving.

Objective 4 : To measure the spinning quality of raw jute, and to relate this to the strength characteristics of different counts of yarn.

Objective 5 : To measure the physical characteristics of jute fabrics having different weaves and different warp and weft constructions, and to relate these to the characteristics of the yarns used.

Objective 6 : To develop methods of bleaching, dyeing, and printing of jute products.

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Objective 7 : To change the chemical and physical characteristics of jute by chemical means.

Objective 8 : To improve the market potential of jute products.

Objective 9 : Trial production and technical service.

Objective 10 : Miscellaneous.

The purpose behind most of these Objectives is quite clear, but some additional explanation may be helpful in one or two cases. Thus under Objective 1 is included a number of joint projects between the Technology and Agricultural Wings of BJRI, whereby some of the work of the Agricultural Wing will be directed towards fibre improvement for spinning as assessed by the Technology Wing. This could be particularly useful for fine yarn spinning, where the dimensions of the fibre itself set a limit to what can be achieved.

Objectives 2 and 3 are concerned with how to make best use of raw materials, and machinery, to reduce costs of Spinning and Weaving, whilst maintaining the required quality of the products.

Objective 4 is specifically concerned with how to assess the spinning quality of raw jute, in order to achieve a better discrimination between the various grades of fibre brought into the mill, and so allow a more objective selection of batch components to spin standard yarns.

Objective 5 is of a similar nature to Objective 4, but in the Weaving field. It is concerned to relate fabric properties to the properties of the yarns.

Objective 6 requires no further comment, but Objective 7 refers to chemical treatments, such as "woollenizing", which change the composition of the fibre, and in so doing modify certain of its characteristics in a useful way.

Objective 8 relates to proofing processes, such as may be used to prevent rotting or burning, to crease resisting processes, and indeed to any process by which jute products are made more suitable for particular end-uses, without changing the nature of the fibre.

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Objective 9 requires some amplification, as it is concerned with the use of the new chemical technology facilities recently installed at the BJRI (Tech). Although much of this equipment consists of full width, standard production machines, nevertheless trial production should be undertaken sparingly, and only as an end to a particular research project. It would be wrong to regard trial production as an end in itself, and to carry this out extensively, for this would tie up machines needed for the research work, and the situation would be no better than trying to obtain research facilities in a production mill.

Overall this is a soundly based programme, concerned with developments in the quality and use of jute fibres and yarns in the mill, and with the development of wet processes for finishing the products in different ways for a greater range of end-uses. Throughout there is an emphasis on the quality of the products, although the need to keep down the cost of manufacture is always in mind.

12. Future of the Project

The present, revised, termination date of the Project is September 1982. It will be apparent from the preceding sections that although the remaining inputs of equipment, training fellowships, study tours, and consultants, could all be initiated before this termination date, it is unlikely they would all be completed before termination. This is particularly so with the machines requested at the tripartite meeting, and also with machinery for fine spinning should this be identified and a positive decision taken to procure. Moreover, proper assimilation of the inputs by the staff of BJRI (Tech) could prove difficult if too much is compressed into too short a time.

Therefore, as regards the inputs still to be implemented, an extension of the Project in time would be advantageous.

The outputs of the Project already exist in a formal sense. There is an Annual Programme of Research, research results are reported at intervals of 6-months, and discussions are going on between BJRI (Tech) and the manufacturing corporation, BJMC. But these outputs require to be developed and

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strengthened, if the Project is to succeed in its objectives of helping to sustain the world demand for Bangladesh jute products. Much can be done before September 1982, but much will still remain to be done after that date.

This is not surprising when it is recalled that at the commencement of the Project in 1978, BJRI (Tech) was not very active, despite its 15 years of existence. There was a need to bring it from this inactive state, to that of a fully functioning research unit, and even in developed countries this could take 4 to 5 years. Under Bangladesh conditions, a longer time still must be expected, and a span of 6 years might be thought realistic. On this time scale, therefore, it may not be until September 1984, that it is clear from the outputs that BJRI (Tech) is fully operational.

The full development of the outputs will depend on the efforts of the leaders of BJRI (Tech), and the involvement of the Project Personnel need not be as active as previously. There are still organisational problems to be overcome, however, some of which arise from the internal structure of the Institute, and others which are related to its size. The research staff has increased appreciably in numbers since the commencement of the project, and this makes the management of the research work more difficult. However, the lines on which the outputs should be developed are now apparent, and although some further guidance may be necessary, this need not be a major matter.

To help ensure the success of the Project, therefore, it would be advisable to consider extending its duration by a further 2 years after September 1982, with a final termination date of September 1984. This will provide ample time for the inputs to be completed, as well as time for the development of the outputs.

In this event, the Project Administrator and office support staff would be required to continue, to handle the detailed implementation of the remaining inputs and provide the necessary UNDP/UNIDO contact. But it would not be necessary for the Jute Technologist to spend as much time at BJRI (Tech) as in the past. One or two short visits each year, to evaluate progress, should be sufficient. In addition, it would be desirable for the Consultant in Chemical Technology to make an occasional return visit, to evaluate progress in

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in this most important area.

The inputs which have been considered in this discussion are, of course, the present outstanding ones. But it may happen that as the institute develops, further inputs become desirable, in which case if a need is shown, it should receive consideration at the time.

As the activities of BJRI (Tech) develop, they will cover an increasing area of the jute industry. If, as seems likely, other UNDP/UNIDO technical assistance is provided for jute development, it would be advantageous if the Project at BJRI (Tech) could be integrated with these other projects at their commencement. In this way, the full value of UNDP/UNIDO assistance to the Institute would be obtained.

13. Future Policy for BJRI (Tech)

The internal discussions leading up to the Programme of Research for 1932 have shown the need for a clearly defined policy for the future development of BJRI (Tech). In 1977, the view of how the research work should develop over the years had not been fully thought out, and because of this the Project was designed simply to enlarge the basic facilities already existing at BJRI (Tech) for spinning, weaving, and chemical technology, and to provide a reasonable degree of overseas training in those and allied areas. The outputs expected were basic to any future policy, being concerned with drawing up realistic research programmes, reporting research results, and developing a good liaison with the jute manufacturing industry.

But now, 4 years later, the position has changed, and a wider view is being taken of the activities of BJRI (Tech). To improve the performance-on-the-floor of all-jute Wilton Carpets is already part of the Research Programme, and it has been suggested that studies of jute blankets and jute needle-felts should also be taken up. More extensive studies of yarn production by different types of spinning machine are proposed, in parallel with the twistless spinning system being studied in collaboration with T.N.O.

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Moreover, it is argued that if the full potential of the jute fibre for textile purposes is to be realised, more detailed study of the chemical and physical structure is required to gain a better understanding of the ways in which the properties of the fibre may be altered and improved.

To carry out these widened activities would require access to machines and sophisticated instruments not readily available in Bangladesh for research purposes. To provide appropriate facilities at BJRI (Tech) would be costly in the extreme, and outside the scope of the present Project. But if it should be thought that in the long term the Bangladesh jute manufacturing industry would benefit from such researches, the work could alternatively be carried out at locations where the necessary facilities are available.

Counter-arguments to the diversification of activities suggest that BJRI (Tech) should give more emphasis to the immediate problems of the manufacturing industry. It is said that the Institute should be integrated more and more closely with the industry, and, by penetrating into the mills, provide an informed technical service dealing with the daily problems as they arise. To achieve such a degree of integration would, of course, require the liaison with the BJMC to be very close and harmonious.

The ultimate policy for BJRI (Tech) will no doubt take into account all these arguments and include a realistic mixture of mill activities and longer term research. But it is quite evident that before a definitive work policy can be established, more discussion is necessary, and it is desirable that the views of all sections of the jute industry should be made known.