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The Construction Industry

Die Konstruksiebedryf

16th March 1992

Mr Murphy Morobe
Head : CODESA Administration
C.O.D.E.S.A.
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Dear Sir

CONSTRUCTION INDUSTRY PRODUCTIVITY AND
QUALITY COMMITTEE

I refer to your recent telephone conversation with mr Brian Phillips of the South African Federation of Civil Engineering Contractors and to the Papers describing C.O.D.E.S.A.'s five Working Groups which you kindly sent him under cover of your letter dated 27th February 1992.

As Chairman of the above Committee, I have pleasure in forwarding a Report on Its Recent Activities which I feel to be a most important consideration in the successful introduction and future prosperity of the New South Africa which offers so much hope to its peoples.

I am sure you will steer these Papers into the right hands in C.O.D.E.S.A. as there presently appears to be no directly pertinent Working Group responsible for such matters. It may be considered that an additional Working Group might be introduced to deal with "INFRASTRUCTURE AND HOUSING : ITS MAINTENANCE AND DEVELOPMENT" or similar, in which "PRODUCTIVITY AND QUALITY" might be successfully housed.

Please/...2.

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Mr M. Morebe

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16.3.1992

Please let me know of your reaction to these comments and the enclosed document, as the Construction Industry is anxious and keen to participate in C.O.D.E.S.A.'s activities towards a new, healthy and prosperous South Africa.

Yours faithfully



C.D. ROUX
CHAIRMAN
CONSTRUCTION INDUSTRY PRODUCTIVITY
AND QUALITY COMMITTEE

Encl.
CDR/jf

CONSTRUCTION INDUSTRY PRODUCTIVITY AND
QUALITY COMMITTEE

INTRODUCTION

In February 1992 the Building Industry Federation of South Africa, the South African Federation of Civil Engineering Contractors, and Representatives of other interested parties, got together to consider a combined approach to the problems of Productivity and Quality in their Industries. The Construction Industry Productivity and Quality Committee was thus formed with the following as its Mission Statement:

"The Mission of this Committee is to measurably enhance the effectiveness and efficiency of the Construction Industry in South Africa.

To this end, the Committee will identify and investigate macro and micro factors affecting Productivity and Quality in the total Construction Process, and ensure that appropriate Improvement Programmes concerning those factors are implemented."

In addition, five Working Groups were instituted to deal with the following leading considerations:

- * Appropriate Design and Constructability;
- * Manpower;
- * Productivity;
- * Strategy : The Next Ten Years;
- * Safety.

These Working Groups report to the "Macro" Committee on an annual basis and to the Executive Committee on a quarterly basis. The Executive Committee directs the Groups' Activities, whose Findings and Proposed Action Areas are set forth in the following Reports:

APPROPRIATE DESIGN AND CONSTRUCTABILITY

This Committee has identified its target area and has addressed letters on this subject to Major Client Bodies and Institutions.

Within its brief, the Working Group has identified the following major problem areas which affects Productivity:

1. Use of Non-Standard Specifications and Documents;
2. Manpower Training and Education;
3. Lack of Meaningful Research by Research Organisations.

The Object of the Working Group is to bring to the attention of Clients the range of factors under the broad heading of Appropriate Design and Constructability which have an effect on Productivity, such as:

1. Timeous Forward and Appropriate Planning. For instance, in the Public Sector there should be sufficient time for the Proper Planning of Projects and there is a need for Rolling Budgets.
In the Private Sector there is too much of a rush once a Project has been decided on and it is then expected for the Construction Industry to make up lost time.
2. Appropriate Design, Specifications and Documentation. This should take into account the Needs, Appropriate Technology, Availability of Materials, Project Location, Capital Cost versus Maintenance, Need for Labour Intensive Construction and Affordability to the Users.
3. Construction. Contractors' input in the early stages of Design may lead to a better Construction Process and Enhancement of Productiity. Resource Identification of Required Plant, Materials and Labour is essential at an early stage.

Promotion of these concepts to Clients is a major task. The Committee is addressing this problem and will develop an Action Plan within the near future to market these concepts.

MANPOWER

From an investigation undertaken by the National Productivity Institute some years ago, 21 prime factors affecting Productivity in the Civil Engineering and Building Industries were identified, of which the following eight related directly to Manpower:

- * Lack of Management Skills;
- * Skills Shortage;
- * Lack of Training of Site Personnel;
- * Poor Planning and Programming;
- * Inadequate Planning and Organisation Skills;
- * Lack of Productivity Standards;
- * Inadequate Applied Education and Training;
- * Lack of Commitment in the Provision of Education and Training.

The Manpower Working Group of the Construction Industry Productivity and Quality Committee has thus been charged with the task of examining all possible aspects of Manpower, and has identified the following issues for investigation:

1. The crisis in the Education System and its effect on Education and Training in the Construction Industry;
2. The role of Technikons and Universities in providing Education for the Construction Industry and the current Curricula;

3. Numeracy and Literacy;
4. Effective Financial Support for Training and Education;
5. The Current Training and Education Programmes in both the Civil Engineering and Building Industries, Improvements and Rationalisation;
6. The Future Manpower Needs of the Construction Industry.

Whilst all these issues are currently under review by the Working Group, the Group developed a "Numbers and Cost" Presentation relative to the "Kick-Start" approach recommended in the Ned/Perm Scenario for the Building of some 200 000 Houses per annum. A number of Presentations have been done in this regard and information made available to the relevant Cabinet Ministers.

The scope of the Working Group falls entirely within the Mission of the Productivity Committee and its Objective is to Develop a Strategy for Manpower Development to ensure Effective and Efficient Optimum Utilisation within the Construction Industry.

PRODUCTIVITY COMPETITION

It is almost impossible for the Construction Industry to supply a generally acceptable description of How to Promote Productivity Improvement within a company. Management Styles, Competency and the Environment in which people operate differ too much. However, taking the Improvement Process step by step and developing a suitable approach which can be implemented to improve organisation receptiveness, Productivity Improvement can be integrated with the existing Management of a Company.

Endeavours are being made to highlight and formalise the theoretical Productivity Improvement Process for the Construction Industry within the context of the complete Management Process. Further, to Place and Promote present Productivity Activities which already take place in Construction Companies within the context of the Improvement Process and to closely outline specific areas requiring closer attention and recommend practice to address them.

As a part of the Process a Construction Industry Productivity Competition is being established and work is progressing according to Programme in order to host the first Competition Awards Ceremony in February 1993. Task Groups are tackling Competition Administration; Procurement of Funds; Promotions and Technical Design.

Final arrangements have been made for Promoting Productivity and the Competition through various Contracting Magazines, Press Releases and a Series of Seminars to be held country wide. This will be followed by Presentations on Productivity to interested parties on their request. All relevant information pertinent to the Competition, Closing Date, Adjudication Period and Award Ceremony will be announced at the various Seminars.

SAFETY

Loss Control and Safety is a Management Driven Programme and appropriate Seminars have been held in Durban, Johannesburg and Cape Town, aimed at the Civil Engineering Industry, with a view to showing the merits of a Loss Control Programme.

It is intended to continue to reduce the Number of Injuries, Fatalities and Waste by strongly promoting Safety and Loss Control Awareness amongst Employers in the Industry.

To achieve this Objective, the following Services are provided:

1. Site Visits and Surveys : To Ensure Legality, to Advise on Possible Losses, Unsafe Acts, Unsafe Conditions, Unnecessary Waste, Poor Labour Utilisation, Security Problems, Poor Housekeeping, Plant, Tool and Equipment Abuse. Training Needs are also often identified. These Site Visits are carried out after initial contact has been made with Top Management.
2. Documentation : Checks are carried out to ensure that Mandatory Material is Available on Site and, where not, Registers, Appointment Forms, Machinery and Occupational Safety Act (Abridged Version) and Guidance Charts, etc., are supplied.
3. Crisis Help : This is constantly available, but often these Services are really only appreciated fully after an Injury or Damage Accident or due to a Department of Manpower Inspector's Visit.
4. Workmen's Compensation Guidance : Advise is provided concerning Rebates, Assessment, "Loading" or correctly compiling Claim Forms, in accordance with the Act.
5. Safety and Loss Control Seminars : These are arranged and conducted either as Open Seminars at Strategic Venues, or as Closed In-House Seminars with Members of the Company.
6. Star Grading : The Star Grading Programme is both prestigious and sought after, being a Systematic Management Improvement Programme for Building Sites.
7. Safety Competition : To further Improve Safety Standards and Awareness, Inter-Site Competitions are encouraged, as well as BIFSA's Regional and National Safety Competition for both Building Sites and Allied Trades.
8. Posters : Posters are distributed and explained. These achieve the Purpose and Function of Maintaining Safety Awareness.
9. Education : This is done by Films, Videos, Slide Presentations and through Construction Magazines - all serve to Promote Safety Awareness.
10. Lectures : These are presented at Universities, Technikons, Technical Colleges, Training Colleges and Other Centres.

STRATEGY : THE NEXT TEN YEARS

The following points have been agreed as being part of the scenario for the Next Ten Years:

1. The Construction Industry will have to compete with the rest of the world in Southern Africa. An advantage is the exposure of our Labour Force and the opportunities thus created, but our Management Skills have to be enhanced, and we must endeavour to Control the Construction Environment.
2. The problem of Cyclical Supply of Work must be addressed. A slight variation is acceptable, but excessive variations cannot be tolerated since the Impact on Labour and the Development of Productivity is disastrous.
3. Mega Projects such as Power Stations, Large Dams and Toll Roads will most likely be developed by Private Enterprise in association with Government, since Projects would have to be dealt with in a fast, efficient and most productive manner. This could to a certain extent alleviate the cyclical variation in the Supply of Work, since under-utilised capital would be used to the benefit of society and the whole country.
4. There will be much more demand for more meaningful participation by disadvantaged people in the Construction Industry in a variety of fields.
5. These people in our community have the potential, but lack the necessary confidence to participate fully in the Work Environment envisaged - this will have to be addressed in the areas of Educational Training.
6. Upliftment must be accelerated to help people achieve the maximum of their ability in their chosen field of endeavour. Education will play a vital role in this upliftment, and it is also necessary that sufficient Job Opportunities be created to gainfully employ and develop the skills of such people.
7. Greater emphasis will be placed on social issues in the Next Ten Years. These softer issues can create Stability and a Better Environment for Developing Social Responsibility, and thus Productivity.
8. Upgrading of Townships will be the responsibility of a Local Authority such as the Regional Services Council, and not that of Central Government. It is felt, however, that the Bulk Infrastructure and Maintenance thereof will still be the responsibility of some Central Government.
9. To get full co-operation of the larger community will be vital for future Construction Projects, and the Productivity of the Industries. The short-term/long-term input of the Industry will also change as the Development of Skills takes place. Management has always played an important role as regards Productivity and this role will increase even further in the New R.S.A.

10. South Africa must be acutely aware of the need to Apply Appropriate Technology since it Optimises Wealth Creation. We must therefore take Technological Principles to all people by means of Awareness, Education and Training.
11. It is foreseen that there will be an increase in Labour Intensive Contracts in future, and we must take cognisance of this fact and be proactive to adapt in Standards/Design/Construction Methods to accommodate this trend. It is important to note that Construction will have to adopt affordable Standards with ample scope for subsequent Upgrading. To compromise on Standards, does not necessarily mean a compromise in Quality.
12. Labour Unions could play an increasingly important role in the Next Ten Years. Unions will be the driving force for the Training of People and Decision Makers, which will Improve Productivity. The Unions could also play a key role in influencing Government/Politicians and can thus be instrumental in Improving the Work Ethic.

Consultation with all the other Committees, the A.N.C., the Government, etc., is important, as well as the Collection of Facts regarding Hopeful Investments forthcoming to South Africa.

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BJP/jf
16th March 1992