MANPOWER STUDY PLAN FOR SOUTH COTABATO/SARANGANI AND GENERAL SANTOS CITY (1994-2000)*

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Introduction

Recent developments in South Cotabato/Sarangani/ General Santos City (SOCSARGEN) have resulted in increased economic activities in the area. Over US$ 200 million of investments in infrastructure are being made under the Mindanao Development Program such as the construction of arterial roads implemented under the Area Development Project and the trade during the past two years. This is evidenced by a substantial increase in the number of business establishments operating there resulting in increased economic activities and, ultimately, in higher employment. Furthermore, investors are beginning to appreciate the enormous economic potentials of the area, whose economic importance as an investment destination in the country and in the East ASEAN region has been greatly enhanced. These investors have been coming to SOCSARGEN to look for possibilities of starting their business operations there.

An analytical study under the Growth Plan Project was conducted to estimate the impact of selected infrastructure on the economy of SOCSARGEN. The results of the study indicate that the improvement of the arterial road network, the construction of the new airport, the improvement of the Makar

* A study conducted for Louis Berger International Inc. at Gen. Santos City, 1993.

Wharf, and the construction of the few fishports will result in a higher regional output and income brougth about by industry's response to the projected increasing demand for agricultural products by other regions (and other countries as well) and the reduction in transportation cost as a result of these infrastructure developments. This increase in economic activities will eventually translate into thousands of additional jobs each year for the region.

The preliminary results of the study were presented to and validated by 50 participants from **ETIs,** the various GOs and NGOs, and the industry and business sectors on October 5, 1994 at the Family Country Homes and Convention Center, General Santos City. Various recommendations and issues discussed during the workshop were incorporated in this duty. In addition, the highlights of the analysis of a similar study conducted by National Manpower Youth Council (NMYC) in the area, were also incorporated in the latter part of this report.

The economy of SOCSARGEN is generally based on agriculture, which employs 252,000 of the total of 444,000 employed persons. According to the 1993 Labor Force Survey of the National Statistics Office (NSO), 57% of total employment is in this sector, while 8% is in industry and 35% is in services. Total employment increased by an average of 2.55% annually during the period 1988 to 1993. A significant level in employment was noted in 1993 when about 45,000 more jobs were registered, compared to the previous year. This was the year when the arterial road projects were completed and their initial impacts felt.

Based on the Labor Force Survey of the NSO (which is a household survey), approximately 76% of those in agriculture are self-employed (mostly farmers and unpaid family workers), while the rest are wage earners or salaried personnel. The same

is true for the wholesale and retail sector and the transportation, communication, and storage sectors. On the other hand, there are more salaried workers than self-employed individuals in the manufacturing and construction sectors; the finance, insurance, and real estate sectors, and the community, social, and personal/ personnel service sectors.

According to the 1988 Census of Establishments of the NSO (which was based on an industry survey), paid workers constituted about 82% of the total employment (60,737), while the rest were owners and unpaid family workers. Bigger establishments (with ten or more workers) hired close to 60% of employed persons, while smaller establishments (with less than ten workers), which are greater in number, hired the remaining 40%.

In all sectors, there are more employees engaged in production or operations than those engaged in both management and administrative functions. The manufacturing sector is the biggest employer, hiring 44% (22,104) of the 49,689 paid employee in 1988, followed by the wholesale and retail trade sectors (10,317) and the agriculture sector (6,107).

Project Rationale

Despite the tremendous increase in employment in 1993, there was still a slight increase in unemployment in the area. Generally, this was caused by a growing labor force. The labor force is growing because many are encouraged to enter the labor force due to the increasing **employment opportunities** provided by new and expanding business and due to in-migration of people from different parts of the country, who recognize the increasing employment opportunities in SOCSARGEN. This can also be

traced to the sourcing of jobseekers from SOCSARGEN.

The construction of the new airport has just begun and the improvement of the Makar Wharf and the Fishport are scheduled to follow very soon. With the expected take off of a number of investments being promoted by the Growth Plan Project in the area, more employment opportunities will be generated, indicating a potential labor skills demand/supply problem, if this is not given due attention now.

To assess this potential problem, the Manpower Plan Study was conducted.

Objectives of the Manpower Study

1. to quantify the available and current and potential demands for various manpower skills for the industry sector in the study area

2. to identify and quantify the manpower supply-demand gap

3. to assess the capability of local educational and training institutions to support human resource development efforts in South Cotabato, Sarangani and General Santos City

4. to recommend measures to enable the labor market to be more responsive to the needs of the local community

Methodology

To get basic information on manpower demand and supply in the area, two surveys were conducted on all vocational/technical institutions and post-secondary academic institutions to establish their manpower supply capability; and 362 industrial establishments of different asset sizes to estimate the demand for manpower. The surveyed establishments constituted about 7% of the estimated total number of establishments in SOCSARGEN.

The demand for manpower was estimated as the sum of the manpower requirements of planned projects (infrastructure projects such as the airport and fishport construction, the Makar Wharf expansion, the second half of the NIA Ten Year Irrigation Development Program, and a number of proposed agro-industrial investments being promoted under the Growth Plan Project), planned expansion of current business operations, and natural sectoral growth brought about by market diversification or by expansion of production capacities or capacity utilization.

Manpower demand, based on the survey, was extrapolated to reflect that of the total business establishment requirements. Natural growth was taken as the observed growth rate in employment before the infrastructure intervention (completion of the road improvement project) took place. This is the period from 1988 to 1992. The established employment growth rates by sector, of paid employees were applied to the 1993 employment levels to estimate the projected employment of the subsequent year. The process is repeated up to the year 2000. Distribution of skills requirements was based on the relative importance of each skill category to the annual increment in paid employees.

There are sectors, however, with declining growth rates in employment, like the mining and quarrying, manufacturing, electricity, gas and water, and transportation sectors. Because the NSO data is rounded off to the nearest thousand employees, the electricity, gas and water sector appears to have high negative growth as the annual increment in employment is lost in the aggregation process which significantly affected the estimate. In the case of mining, the figure in 1993 should not be miscontrued as a complete stop to mining activities but, rather, should be interpreted as a figure below 500.

This study assumes that there will be a reversal of trend in employment in these sectors, particularly the manufacturing sector, as the demand for goods and services increases resulting from increased income due to the growth of the economy. High growth in employment for these sectors is expected when all the infrastructure projects are completed and their full impact felt. Hence, the effects of negative trend in employment is dropped in the projection process.

The survey on ETIs provided information on the total number of graduates for each course within the period 1991-1993. It also provided information on the school plans to open new academic courses within the next few years.

Projections on the total number of graduates from the ETIs were estimated using the historical trend observed in the number of graduates over the same period. Where the trend is relatively level, the average number of graduates over the period was used. Where the trend exhibited ws a continuous increase or decline, the geomatric growth rate was computed. However, the short period of observation tended to result in high growth rates that are not expected to continue in the long run. To be conservative,

only 50% of these growth rates were adopted in the projection. In cases where information was available only for 1993, the last year covered in the survey, the figure was assumed to continue with no significant changes over the next few years.

To complete the analysis, the manpower gap, represented by the difference in the manpower demand and supply, was estimated. This will be the basis for determining the local manpower problem in terms of the type of skills largely affected by excesses in demand over supply, and vice versa.

Assumptions and Limitations of the Study

1. The trends reflected by the survey sample is mirrored by the universe.

2. The proportion of the paid employees to total employment under each sector (based on the Labor Force survey) shall be valid without significant variations between 1994 and 2000.

3. The manpower supply shall come from the graduates of ETIs.

The study has the following limitations:

1. Projections do not include:

   a. detailed skill demand for the self-employed sector

   b. the unemployed and underemployed sectors

   c. demand due to attrition and personal turnover.

d. positions not identified by surveyed establishments
e. the government sector manpower demand.

2. Impacts of technological changes and technology upgrades are underestimated.

3. Supply projections do not cover supply skills from:

   a. in-migration

   b. company sponsored training

   c. ETIs outside study area.

4. Projections on the manpower demand are based on the plans of the surveyed establishments for additional hiring due to planned expansions of current capacities and on proposed investment projects that are expected to take place soon.

5. The projections made by the surveyed establishments are short run in nature and tend to become indicative in the subsequent years. On the other hand, the natural growth rate in employment did not capture the impact of infrastructure. These factors tend to underestimate the employment demand in the future.
6. Since estimates for manpower supply do not include skilled persons currently unemployed due to the absence of relevant data on present skills, the manpower demand-supply gap will be greater since the supply estimate is understated.

Results of the Manpower Study

Based on the survey and the projection due to natural growth of employment in the study area, about 20,500 jobs are to be generated in 1994, 8,400 for 1995, and over 6,000 additional jobs each year until the year 2000. The agriculture, construction, finance, manufacturing, and services sectors will be the biggest employers of these additional jobs.

The big demands for employment are for technically skilled workers such as electricians, welders, masons, mechanics, foremen/leadmen, carpenters, plumbers, heavy equipment operators, and other related workers. This can be attributed to the implementation of several infrastructure projects and the proposed expansion of manufacturing staff such as clerks/secretaries, salespersons (marketing personnel), accounting clerks, and security guards, among others, as the increase in business activities will require their services. Significant demands for unskilled labor such as farm workers, factory workers, laborers, and utilitymen are expected to meet the increasing demand for goods and services due to higher consumer income fueled by increase in economic activities.

The biggest demand for marketing will be coming from the finance, insurance, real estate, and business sectors while others will be coming from the wholesale and retail trade sectors. As these sectors make money from sales, higher demand is expected since bigger marketing staff reflects bigger potential income. Marketing personnel are expected to work as sales representatives, account representatives, salesmen, sales counselors, and investment consultants.

This study indicates a demand for a number of skills not presently offered by the local ETIs. These would come from courses on Chemical, Industrial, Computer, Geodetic, and Mining Engineering as well as Veterinary studies and Medicine. These projected demands are quite small, however, and can easily be satisfied either by residents who acquired their degree elsewhere or by other qualified non-resident professionals. Otherwise, it becomes a supply problem.

Other Scenarios

The study estimated the employment levels in SOCSARGEN for the period 1994-2000 under two others scenarios. One scenario (medium estimate) assumes employment levels to grow at the projected population growth rate during the period (3.1%). Under this scenario, a total of 106,000 jobs (both salaried and self-employed) will be generated.

The other scenario (high estimate) is based on 5% growth rate, about half of the estimated employment growth in 1993 over the preceeding year. Under this scenario, a total of 15,000 jobs will be generated during the period.

Conclusions

Public economic policy in almost every country is centered on the attainment of high levels of employment. The leaders of any government recognize that substantial unemployment

generates social unrest and political instability. Morever, it represents the waste of valuable national economic resources which could have been used to advance individual welfare and national goals. It is not surprising to full or maximum employment.

A high level of employment is attained not only by creating more employment opportunities but also by the ability of the industry to meet its manpower skill requirement from the available source of supply or, conversely, the ability of the labor supply to match the skills required by the industry.

Based on the survey, there is an apparent mismatch in the number and type of skills required by industry and the skills produced by the local education/training institutions. This mismatch often results in unemployment and underemployment (as overqualified jobseekers are sometimes forced to apply for low-paying jobs unrelated to their skills). Moreover, it entails additional cost to the employers for the training necessary to obtain optimum productivity for the new workers.

The study did not cover the possibility of labor shortage as there are still an undetermined number of qualified yet unemployed individuals looking for jobs. Even the analytical study on the impact of infrastructure, which estimated the additional jobs in terms of the equivalent number of daily wage earners generated each year due to the impact of the infrastructure development, downplayed the possible overheating of the economy and, consequently, labor supply shortage.

This mismatch between the supply and demand for manpower skill is largely due to the lack of information on the labor market. This is because labor market information does

not come without cost, either to the employee or the employer. This is evidenced by the results of the survey which state that about 65% of the establishments' preferences for sourcing their manpower requirements include cost-free methods such as referrals and coordination with schools and various training institutions. This does not seem to have a far - reaching effect. The apparent effect of this lack of information is a high number of graduates in courses/skills where there are low demands while high demands for skills not produced by the local educational institutions have to be satisfied by sourcing supply elsewhere.

Other related conclusions from the technical workshop are as follows:

1. There is a need to strengthen and reorient basic education and to equip students with the required cognitive skills, especially in communications, and the appropriate values and attitudes, including good manners and right conduct.

2. The oversupply of skills in certain low-demand jobs have resulted in the over-qualified skilled labor to obtain employment in lower-skilled or unskilled tasks such as in production or farm work. In response to this phenomenon, ETIs have committed themselves to redirect their academic programs to certain areas where indications of potential high demands exist.

3. Due to the insufficiency of resources available to address the manpower development concerns within SOCSARGEN, there is a need for the following to be undertaken:

   a. Coordination of efforts, sharing of resources, and complementation of programs among all parties concerned with manpower development such as LGUs, ETIs, GOs and NGOs, and the industry and business sectors.
   b. Focusing of efforts and resources on skills requirements with the highest demand or the greatest economic impact.
   c. Immediate address of manpower development needs.

On the other hand, the NMYC study captured in detail the different jobs skills requirements of various manufacturing industries in the study area. The skills are classified, ranging from unskilled (such as those in packaging, labelling delivery) to highly skilled (those handling various machines and equipments) and professionals (engineers and chemists involved in industrial plant operations). The skills requirement classification under this study and the projected skills of graduates under the Ateneo de Davao University manpower study indicate that while some graduates indeed fit into the requirement, there are special skills which have to be learned during employment and that the basic technical skills acquired from the training institutions will help the graduates to adjust to this new skill requirement with ease.

Recommendations

One general approach towards the resolution of this imminent problem would be the setting up of a manpower information system that would:

a. link the current, as well as prospective, manpower skills needs of industry and the supply to be generated by the educational/trainings institutions; and

b. include vital information on the local industry, labor requirements which would guide students, the other prime player in this labor market, on the current and future local employment prospects.

In addition to the information system, mechanisms for employment referrals, based on strong linkages between skills users (i.e., industry) and skills suppliers (i.e. ETIs), should be institutionalized.

These are not easy tasks considering the magnitude and the varying characteristics of the industry sector. But these could be initiated through the strengthening of the Technical Advisory Committees (TACS) composed of members representing various industry sectors and the ETIs, who would meet regularly to discuss current issues affecting the labor market, as well as the outlook of industry that would affect employment. The commitee is expected to work long term for this purpose and the members (particularly those representing industry) are expected to provide valuable inputs concerning potential employment demands so that the perceived manpower needs of industry could be met.

The vital information on the prospect of future manpower skills requirement has to be given due recognition by the ETIs. This would mean giving emphasis to courses where higher demand for their corresponding skills is expected. This also mean orienting the students on the prospects of employment in

the future relative to the course, which could eventually mean cutting down the more popular courses with less employment demand.

As diplomas awarded by the ETIs to the graduates do not guarantee immediate employment after graduation (even in the presence of employment demand, as industries consider other factors such as experience) programs should be offered to update and familiarize the students with the current technological developments. This would equip the students with better orientation towards the skills required by the prospective employers.

The current practice by some industries to admit students for practicum activities is welcome. This practice should spread to more establishments to allow more students to enjoy this privilege and enhance their chances of getting the right job at the right price. Moral fortitude and discipline, however, should be exercised, to avoid abusing this arrangements in order to save on labor costs to the detriment of workers who have already acquired the skills for regular employment.

More establishments should be encouraged to coordinate with the ETIs for their manpower needs. In response, the ETIs should produce quality graduates to make them more competitive in the labor market and enhance the academic integrity of the institutions.

The lack of appropriate information and the inefficient dissemination of manpower-related information have resulted in bringing about the current manpower concerns. To address these, the following measures are recommended:

a. Implementation of a manpower information system that will provide

   i. To ETIs and local job seekers, the current local industry labor requirements, and

   ii. to industry and business and to students, the current supply capability of local ETIs.

b. Implementation of a Manpower Information Dissemination and Communication Program that will make available, thru multi-media approaches, relevant manpower-related information to all sectors of society, most especially to the masses from whose ranks the students come in order to appropriately guide the latter towards future careers.

c. Establishment of school-based and GO-based career counselling programs to guide students towards careers with high employment potentials.

d. Consolidation of all manpower-related studies such as those done by NMYC and LBII to be able to maximize benefits obtained from such studies.

Due to such current international events as GATT, BIMP-EAGA, etc., and their potential impact on SOCSARGEN, it is important that local manpower development efforts consider these trade agreements, particularly with regard to the probable increased agreements, particularly with regard to the probable increased employment to be bought about by the impact of these initiatives.

It was observed that local graduates need improvement in communications skills and in their work attitudes to enhance their employability or their capacity to accept higher or greater job responsibilities. The apparent deficiency in communication skills has been traced to curricular programs in the primary and secondary levels which now also need to be upgraded and enriched. Enrichment and upgrading efforts should jointly be undertaken by various sectors and should not be left to the ETIs alone.

The linkage between industry and academe has developed into a strong force and must be pursued to cover other areas as well. These are:

a. Revision of curricula towards other high-demanding skills.

b. Faculty enrichment within the industrial workplace.

c. Acquisition of training facilities to enrich academic programs and implement revised curricula.

d. Implementation of Dual Training System Program in consonance with law.

e. Training of trainors.

f. Implementation of supervisory skills upgrading programs, basic skills training, and skills clinic.

g. Trade testing and accreditation.