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FUTURE STRATEGIES FOR PENNSYLVANIA BLUESTONE INDUSTRY
Wayne G. Mikutowicz and George H. K. Schenck
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The above seem to be the most likely strategies that could be initiated and promoted by the Pennsylvania Bluestone Association. Each one of the alternatives will be looked at in detail below. The economic implications behind these proposals are discussed first.

**Economic Implications**

The major objective underlying the above listed possibilities is to raise the income level of those people employed in the quarries by increasing the net return per unit of stone sold. This can be achieved primarily by two means. The first is by lowering costs either by increasing output while becoming more efficient or by use of new technology. [This implies either moving down along the average cost curve by becoming more efficient or by shifting the cost curve downward through the use of new technology.]

Improving technology seems unlikely because of the small size of deposits and their inherent variability. However, if a new means of locating deposits could be devised, this should have the effect of improving technology, since it would increase the expected profitability of exploration due to a lowering of the investment costs expended on exploration. Improving efficiency of present resource use seems the most likely manner in which the Pennsylvania bluestone producers can lower costs. Basically this could be accomplished by using better management techniques, by improving the skill of the labor force, or by implementing economies-of-scale in marketing and producing by organizing some type of group planning.

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1The expected profitability here refers to the probabilistic expectation of success in finding a deposit (Mackenzie, August 1970, p. 65).
The second means of raising income is by shifting the demand curve for Pennsylvania bluestone so that more is wanted. This, of course, must be done by changing consumers' tastes and preferences for dimension stone. It should be mentioned here that it probably could be safely assumed that the structure of the Pennsylvania bluestone industry as it exists presently is a competitive one. This is evidenced by two facts. First, each producer of bluestone, selling a homogeneous product, will usually indicate that he can sell all the stone that is quarried by him and therefore takes the demand [curve] as given. Second, there do not appear to be any firms whose profits are greatly in excess of industry average. [No substantial economic rents seem to be obtained by any Pennsylvania bluestone producers.] This implies a competitive type of industry structure.

Competition is also indicated by the fact that there are a large number of firms [which is another requirement of the competitive model. That the Pennsylvania bluestone industry has a competitive structure has a bearing on how the demand curve it faces can be shifted.] Since each individual producer takes the demand [curve] facing him as given, he alone will not be able to effect a change. However, if all or most of the producers organize through some type of selling organization, then by marketing and pricing bluestone as a group and by implementing various promotion efforts they could possibly be able to create not only an increased demand for their stone but perhaps do so at higher unit price.

The above concept provides in general economic terms what might be desirable to accomplish through some possible future action. A more detailed explanation could only be provided if detailed data such as
quantity and price statistics were available for an empirical analysis. Unfortunately it does not exist. In the following sections the various strategies will be examined, and finally some plan for long-run development will be formulated from these.

**Formation of A Cooperative**

Cooperatives have been used extensively in various forms and have found the greatest success in the agricultural community. Basically it is an enterprise owned by those using its services and operated for their benefit. The common thread among most cooperatives is that they are made up of a number of small producers. The prime objectives of a cooperative should be first to provide competition with private enterprise and second to enable a large number of ordinary people (the members) to participate in the management and democratic control of their own business organization (Warley, 1967, p. 320).

(a) Open Membership: This principle if carried out literally removes from the cooperative the power to select its members, which could lead to an uneconomic arrangement. Usually this is applied to include only a particular group and to exclude competitors. The problem arises of how the selection is to be applied.

(b) Limitation of Shareholding and Fixed Interest on Capital: The sources of finance for a cooperative are different from those open to an individual firm. There is no emphasis on employing capital to obtain the highest return. Usually the members are in the lower income brackets. The accumulation of capital
depends on budgetary measures, on the creation of reserves from retained profits, from the government or banks.

(c) One Man One Vote: This was initiated to prevent the domination by a particular group and to obtain a democratic type of decision making. It influences the selection of committees, the distribution of profit, the formation of reserves, and some policy decisions. This type of system works effectively in the early years of a cooperative when the interest is keen but as time goes on, there may be a general lack of interest which may result in a lack of communication between committees, staffs, and members.

(d) Distribution of Profit: The cooperative principle is that this should be in proportion to business transacted and not to capital contributed. In practice, this system has been a powerful incentive to cooperative "loyalty" but has sometimes made cooperatives reluctant to charge or offer competitive prices if this would have the effect of lowering bonuses to members.

(e) Role of Central Organizations: These include either government organizations for the promotion of cooperatives or the formation of agencies which the cooperatives themselves have created, which include wholesale organizations, banks and service organizations.

Implied in the Rochdale principles, but not stated explicitly, is that of voluntary membership which is usually equated with that of voluntary participation, i.e., a member trades with his cooperative only when he chooses to do so. This may mean, however, that the
cooperative will not be able to secure the volume of business which would enable it to operate efficiently (Warley, 1967, p. 430).

There are, however, several disadvantages inherent in this type of framework which consist of the following:

(a) The choice or inclusion of uneconomic objectives, scales of operation, and location.

(b) Difficulty in accumulating capital.

(c) The initial structure of the cooperative is small.

(d) The difficulty of hiring talented management.

(e) A tendency to exclusiveness and the imbreeding of ideas (Warley, 1967, p. 433).

Financing a cooperative can take a variety of forms. Basically, there are two general ways in which they can be financed. The first method is to arrange financing by themselves from either external or internal sources. The second method of financing is through government or some special official bodies and sources, but usually this type of assistance must be repaid so that the first method would be of primary concern (Warley, 1967, p. 435).

In looking at self-financing, one method of obtaining necessary capital is through member capital in which members make what are considered long-term loans. These loans can be obtained by making levies in proportion to the volume of business done by each member. This type of financing has the advantage of keeping its members actively interested due to their direct financial participation in the cooperative (Warley, 1967, p. 436).

Another method of financing is the use of share capital. Usually it will be required for membership that an initial amount of shares be
purchased by each member. Members may then make voluntary purchases of additional shares from their earnings or they may make regular payments into the share fund for a fixed period of years. The disadvantage of voluntary contribution to capital funds is that it may leave the cooperative undercapitalized and in a state of uncertainty about their long-term funds. One way to avoid this problem is to have members finance the cooperative at least in proportion to their use of the services provided (Warley, 1967, p. 437).

A major source of internal financing for cooperatives is the creation of reserves funds from the surplus on trading operations.¹ The amounts available each year from this source depend on trading conditions, on managerial skill and on the willingness of the members to forego what would have been redistributed to them. In some cases a fixed percentage of the net surplus is used for the creation of reserves. Reserves seem to provide a sound and satisfactory form of capital formation. Once reserves are established they are a stable form of capital, which is completely in the control of the cooperative, thus requiring no fixed charges to be paid as in other types of capital formation (Warley, 1967, p. 439).

¹One of the disadvantages of this type of financing is that it depends in large part on the amount of trading being done and therefore might take on a cyclical nature. Some kind of stabilizing activity must be carried on when trading activity is slow. Another disadvantage with reserve funds is that the tax structure may complicate their formation. Where they are treated as other businesses with regard to taxation, the initial cost of reserve capital may be high even though no further maintenance charges have to be paid (Warley, 1967, p. 439). When there is a high proportion of reserves to share capital, this may have a psychological effect in that members may not feel the reserves belong to them the same as capital does. This stems from the fact that they can only benefit from reserves through more or improved services or the dissolution of the cooperative and the redistribution of the assets and funds to members.
Finally, one type of capital formation used by cooperatives is loan capital. This can be both short-term and long-term depending on the needs of the cooperative. The most common type of short-term borrowing is the use of trade credit, which arises from the normal commercial arrangements of settling debts within, for example, one month of the receipt of the goods (Warley, 1967, p. 441). One problem that might arise is that the liquidity position of the cooperative may be hampered by the high cost of using this type of credit.

Usually cooperatives will extend a greater amount of credit to its members than it as an organization would be willing to accept. This might have the effect of causing the cooperative to borrow further to finance the borrowing of its members.

The financing of a cooperative will depend on such factors as making sure its capital resources are adequate for the purpose for which it was organized and that its financial structure reflects the balance it wishes to achieve between its various activities (Warley, 1967, p. 442). This financing should be looked upon as an extension of the particular businesses it organized. In this way, each member is enlarging his own enterprise and thus will invest in the cooperative until its marginal productivity is the same as in his own business (Warley, 1967, p. 445). However, this implies that each member is operating his own business efficiently and will therefore be concerned that the cooperative is efficient. If this is not the case then problems will arise in financing the cooperative until efficient management procedures have been employed.
A Cooperative for the Bluestone Industry

From what has been said about the quarrying sector it would appear that this phase of the industry seems readily amenable to the formation of some type of cooperative. There are a large number of small producers whose market share has been declining. A cooperative could have an effect on the demand for bluestone by at least maintaining it at its present level and at the most by improving the demand faced by the small member quarries. This would encourage growth in these small operations.

A cooperative could also serve to lower costs for each member quarry by employing methods in which the economies of larger-sized business units are the greatest. An example of this would be in the use of advertising or in the purchase of supplies (e.g. pallets and diamond blades).

A cooperative would serve to improve the quality of management now existing in the quarry area. This would contribute both to improving demand and to reducing costs. Thus a management function could be set up to decide on what stone deposits to invest in, the surveying and interpretation of marketing data, the most efficient operation for a quarry to use, the employment of new technology, and the development of quality standards for bluestone. Here again economies of size scale could be realized through a centralized management, thereby saving time and money for each individual producer.

All of the above factors are now nonexistent in the quarry area. There is little or no advertising, efficiency of operations are poor and quality of the bluestone is low in many cases. Thus it would seem that the formation of a cooperative would be a viable alternative for
future action. The social effects from a cooperative might also prove beneficial in that increased output could be brought about at lower cost thereby maintaining prices at their present or even a lower level.

Although the efficiency of management may not be optimal, by far the most pressing problem seems to be in the marketing of Pennsylvania bluestone. It would be proper to consider this as one of the primary functions of the cooperative. That is to increase the efficiency of marketing Pennsylvania bluestone. An efficient marketing system should include the following criteria:

(a) Consumers' requirements with respect to form, time, and place utilities, and the relative economies of using alternative marketing practices should be indicated through price signals in the market.

(b) Price movements which serve no useful economic purpose and which are harmful to efficient resource allocation and income distribution should be eliminated.

(c) The costs of marketing should be as low as possible with current technology and consistent with the provision of economical services required by consumers.

(d) Profits in the system should be as low as are consistent with the risks borne and the reward of enterprise and innovation.

(e) There should be no disparity in bargaining power between producers and distributions such as to adversely influence income distribution.

(f) There should be no impediments to innovation and there should be progressiveness in respect to operational and pricing efficiency and product attributes (Warley, 1967, p. 329).
Based on the above, it could be stated that the marketing of Pennsylvania bluestone as it exists at present differs markedly from the above criteria. It would be valid then to use a cooperative to affect the functioning of markets and thereby improve the level of income. Table 6 indicates various methods that could be used to increase income through some type of marketing reformation. These actions, of course, are not limited only to that of a cooperative but could be enacted by any voluntary organization.

Some of these aspects were brought out in the section on economic implications. This table, however, gives a unified picture of what effects various programs will have and is a valuable aid in this respect.

Initiating a cooperative in the quarry area, whether it be strictly for marketing purposes, or one that handles production also, should be based on a solid framework of producer-controlled production units. A definite plan should be followed in the organization of a cooperative such as that used by the Agricultural Central Cooperative Association (Warley, 1967, p. 406).

The first stage should consist of a preliminary inquiry which would provide the basic information needed to set up an appropriate scheme. Such a study would include the following points:

(a) A brief outline of production history and trends, and geology of the area.

(b) The current methods of production now in use and the market values of the various types of bluestone.

(c) Number of quarries, size and number of quarries each operates, and their geographic distribution.
<table>
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<tr>
<th>Objective</th>
<th>Programs</th>
<th>Results</th>
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<tr>
<td>(i) Raise. Consumer Demand</td>
<td>Market and utilization research; increasing points of sale; promotional and advertising programs</td>
<td>Find new uses and outlets; increase availability; change consumer preferences</td>
</tr>
<tr>
<td>(ii) Better Identification of Sub-demands</td>
<td>Quality improvement and control; grade standardization and improved presentation; grade pricing; Inventory programs</td>
<td>Increase proportion of preferred products and grades; Avoidance of regional and temporal oversupply</td>
</tr>
<tr>
<td>(iii) Raise derived demand by reducing marketing margins</td>
<td>Promote competition and operational and pricing efficiency by vertical entry of producers' organizations into buyer's markets; programs of research, grade standardization and the collection, analysis and dissemination of market news; supervision of contractual arrangements between buyers and sellers</td>
<td>Shorten and rationalize channels of distribution; optimize scales, technologies, location of operation of marketing facilities; reduce risks and uncertainties; better coordination of production with handlers' and consumers' requirements with respect to volume, delivery and type of products; reduce need and opportunity for profit; improve income distribution</td>
</tr>
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(d) Present marketing methods used.

The second stage would deal with stimulating interest in the proposed cooperative. Discussions should be set up where the producers voice their opinions about what type of methods would be employed to increase their income. From the discussions will usually emerge a core of individuals who will carry the project into the planning stage.

The third stage would involve a detailed study used to find out the costs of each stage of production and marketing from a cross section of producers. This will give an indication of the benefits to be derived from the proposed cooperative. Also the position of individual producer's costs can be compared to the group average. An appraisal of the areas stone production should also be made in order to provide adequate facilities for the future.

The fourth stage would entail preliminary planning. This will involve an assessment of facilities required and the technical and management talent available. The total capital requirements of the cooperative should now be estimated.

The fifth stage would involve detailed planning. The methods of obtaining the required capital and financing should be set up. This will indicate the determination of entrance fees and capital structure. The formation of a legal incorporation is usually necessary and will provide the members with limited liability. The overall control of the cooperative remains in the hands of its members. The formulation of a trading agreement between the members and the organization should be determined and the obligation of both parties clearly defined. Finally, a detailed evaluation of operating costs and service charges should be determined.
Although the cooperative seems like a highly viable type of strategy, there are disadvantages inherent in its nature and operation. One of these is democratic control, which might have a negative effect on efficient decision-making. Another is the payment of low managerial salaries and so the attraction of managers of uneven managerial capacity. The insistence on the equal treatment of economically unequal members is another negative factor. Also, membership is not usually dependent on an adequate investment, regular trading, or the market acceptability of products (Warley, 1967, p. 333). This last factor has important implications for the bluestone area for it is felt that a major problem would arise first in financing such an organization through its members and second in keeping the members trading with the cooperative.

Finally, there is, of course, the matter of the legality of such an organization. Before any plans were formalized with respect to a cooperative it would be wise to seek out legal counsel to avoid being involved in any violations of the antitrust laws.

**Phasing Out of Pennsylvania Bluestone Industry**

The primary emphasis in this alternative strategy is to examine the practicality of shifting the labor force out of the quarrying of Pennsylvania bluestone and into other industries in the area. It assumes that the market for Pennsylvania bluestone will continue to decline and that any investment of time and capital to prevent this decline would be unjustified. This shift of labor would occur over a period of years based on the rate of normal attrition of the present labor force and that of the stone deposits.
There is already a trend in this direction. In many of the quarries it is difficult to obtain skilled labor to produce the stone. Most labor is of a non-permanent type who view quarrying as a secondary source of income. One of the primary reasons for this is the wage rate and supplementary benefits that are given. These are usually below what one might receive in other jobs. Another factor which should be mentioned is the type of work involved. The quarrying of bluestone is a physically strenuous task which requires some skill but mostly experience in what is referred to as "knowing" the stone. This is built up over the years. The job offers little opportunity for advancement and is seasonal. The average season is usually eight to nine months long. Due to this one finds a constantly decreasing pool of labor available for quarrying bluestone.

The regional effects of such an action should also be considered. Since most Pennsylvania bluestone is quarried within Susquehanna County, any benefits derived from the quarrying sector accrue directly to the region. If the labor were to move into other industries, there might be a decrease in benefits to the region. One way to determine the effect of bluestone quarrying on the region would be to determine a regional income multiplier for the industry and compare it with that of other industries in the region. It would seem plausible that the bluestone industry might also have a stabilizing effect on the region's economy by providing an occupational outlet for surplus labor. One other important factor is that the bluestone industry can be classified as an "export" industry, in other words, most of its production moves outside the region. Thus, it is one of the basic industries of the region and as such it plays a vital role in the region's economy.
Finally, in phasing out the production of Pennsylvania bluestone, instead of a complete discussion there might be a restructuring of the industry into a monopoly. This would bring with it the usual implication of a lower output of stone at a higher price. This would probably be less desirable than a plan where all producers could benefit from the production of bluestone.

**Formation of An Information Agency**

Another alternative strategy calls for the establishment and funding of a promotional office. The implementation of such a plan would aim at the same effects as described in Table 6, in the section on cooperative strategy. There would be one important difference. The agency would not act as a purchasing agent. It would let the bluestone producers sell as usual without the interference in the market. The primary purpose of this agency would be to serve in the processing of information about various markets and to publicize Pennsylvania bluestone.

There would be no effect on pricing policies of the individual producers nor would any attempt be made to increase the efficiency of producers through any type of group management. It would, however, be able to locate potential outlets for Pennsylvania bluestone and serve to bring closer together both buyer and seller. In essence, it could be considered an extension of the bluestone quarries' business in that it performs a function that he as a producer does not consider, that of establishing lines of communication with the consumer.
If this type of strategy were effective, it would probably have the result of increasing the production of bluestone. There would be a disadvantage in that no efforts were made to produce the efficiency of production, the price of bluestone would increase and quality would suffer due to the strain on supply. Thus, although the agency serves an important marketing function it neglects the adjustment of supply to meet the new demand.

The scope of the proposed agency could be broadened to provide producers with information about new technologies and new uses for stone. This would keep costs down with respect to producer technology, but it would not serve to overcome problems of inefficient management. The agency itself would be dependent upon the producers for its operating capital and its value as an information gathering function would be severely limited if they were to be diverted into offsetting increasing costs. Thus, a situation which the agency could create, that of increased production at higher costs could lead to its eventual dissolution due to a lack of funds.

Formulation of A More Satisfactory Strategy

From the information gathered concerning the markets for bluestone it is clear that there is an existing and possibly expanding market for this particular material within the broader dimension stone market. However, changes may be beneficial both in the production and marketing of Pennsylvania bluestone. It is also believed that greater benefits might accrue to the region through its quarry industry than if firms outside the region were to absorb the labor force.
From what has been stated previously, it seems that a suitable strategy would seek to increase the productive efficiency and also provide a marketing service for the bluestone quarries. A cooperative would be able to provide these services; however, such an organization could prove to be difficult to initiate and too complex to be managed effectively. The operation of such an organization might run into such problems as pricing fixing through naivete on the part of the managers and therefore might be a cause for antitrust action.

The information agency proposal, although a relatively simple plan, does not seem to be broad enough in scope to bring about the desired effects to the quarries. The most desirable aspect of it is that it does not interfere with the functioning of the bluestone markets through direct control of some type. It would seem, therefore, that some combination of the cooperative proposal and the information agency proposal would provide a feasible plan for the future action.

This combination, which could be initiated under the auspices of the existing Pennsylvania Bluestone Association, would not require a highly-skilled management but could be managed by the people with the most knowledge of the industry, the quarrymen themselves. It would provide marketing information and assist in establishing efficient quarry operation but would not enter directly into the selling of Pennsylvania bluestone. Looking at the future strategy in detail then, the Pennsylvania Bluestone Association could set the following as its objectives:

(1) The Association could become a truly functional part of the quarry area and not just a namesake. Its function would be primarily an advisory one. Since there are so many small
producers it should serve to coordinate them and make them aware of what is taking place in the marketplace.

(2) The Association, as the coordinating body for the producers, should establish quality standards for Pennsylvania bluestone. This should include a standardization of sizes with regard to the various types of bluestone and also a grading system with respect to the quality of the stone. One factor that would help distinguish Pennsylvania bluestone from other types of bluestone would be the use of a trade name, which when endorsed by the Association would indicate the stone is of good quality and meets certain technical specifications.

The establishment of a quality control system and the use of a new trade name are of great importance and should be looked at in more detail. Both of these seem to go hand in hand in creating a respectable market image for Pennsylvania bluestone. From the research conducted, one of the most glaring problems encountered was the poor quality bluestone that was being quarried in Pennsylvania and entering the markets as "Pennsylvania bluestone." As a result of this fact, stone dealers are usually hesitant to buy Pennsylvania bluestone. Thus even if a quality control system was initiated the use of a name such as Pennsylvania bluestone would still carry with it the stigma of past events.

The important implication then is to use a trade name which omits the word Pennsylvania. This would no doubt be an
advantage in overcoming any psychological aversions the stone dealers might have to buying bluestone from Pennsylvania. It would also help in entering into new market areas, where, although the stone dealer might be aware of the Pennsylvania bluestone reputation, they would not be so reluctant to purchase a stone of some other name. One example of a situation this practice has worked well is at Johnson and Rhodes Company across the border in New York. This firm markets bluestone from both Pennsylvania and New York under the trade name of "Elk-Brook Bluestone." It should be mentioned that use of this name is synonymous with quality stone and it also commands higher prices. The use of a new trade name should be one of the first factors decided upon by the bluestone producers; however, in order for this new trade name to have a beneficial effect it should only be used when backed up by rigid quality control standards set up and rigidly maintained by the quarrymen.

The establishment of a system of quality control will probably be one of the most important factors in maintaining and creating markets for Pennsylvania bluestone. The system once initiated will have beneficial effects in the long run, one of which would be increased revenues for producers. The system itself need not be complex, consisting of specifications for various types of bluestone and a grading system for the various qualities of bluestone. There would also have to be a means of checking the stone, most likely by someone in the Association,
who after checking the stone could mark each pallet with the Association trade name, thus indicating the pallet load of stone meets all the requirements set by the Association.

Since the Association would be in charge of quality control, the costs of the individual quarriers would not be directly affected. Due to the rigid quality control, however, less bluestone is likely to be produced since the quarriers will take more time in cutting the stone, although it would be of higher standards and probably sell at a higher price to reflect these controls. Therefore, revenues would most likely remain the same at first and then gradually increase over the long run, as buyers gradually recognize that this is truly a product of predictably high quality.

The initiating of quality controls will at first present difficulties, the greatest of which will be to overcome the careless production methods now employed. However, the sooner it is realized that controls exist for the benefit of the Pennsylvania bluestone industry as a whole, the quicker adjustments in production will take place, and quality bluestone marketed.

(3) The Association should act as the marketing voice for the Pennsylvania bluestone producers. For direct "mail" advertising and personal "missionary sales" contacts it should design a brochure setting forth the abovementioned standards and also have illustrations showing how bluestone is used. Also display kits of Pennsylvania bluestone could be made which could
be sent on loan to architects upon request. The Association should become involved in national dimension stone organizations and become recognized by the Building Stone Institute. It should also take it upon itself to advertise in the trade journals such as "Stone Magazine." In other words, it should create a new marketing image for Pennsylvania bluestone. It must also be responsive to what is going on in the market; this could be accomplished by sending questionnaires to architects every year to see what their thinking is.

(4) The Association should be aware of new uses being developed for dimension stone and how they could be applied to Pennsylvania bluestone. For example one of the major trends in dimension stone today is a systems approach of usage. Here the stone is in some cases preassembled before being installed. This has cut costs greatly on installation saving as much as 10 per cent to 30 per cent, thus making dimension stone more competitive with such materials as concrete (Clift). It would seem bluestone is ideally suited to this technique due to its inherent geologic properties. This could also mean utilization of the large blocks of bluestone found in the bottom of quarries. These could be wire-sawed into smaller panels and then preassembled. New finishes on dimension stone are also of interest to architects, such as the flame finish given to bluestone which was shown in *Stone Magazine* (Clift, Dec. 1968). The Pennsylvania bluestone industry must be responsive to these developments.
(5) The Association should set up some type of methods and practices for quarrying bluestone and also a training program in the use of quarrying equipment. The training of a skilled labor force is of the utmost importance if any kind of quality control is to be established. This factor was often brought up in discussions with various stone dealers. Most look upon Pennsylvania bluestone quarriers as an unskilled labor force.

(6) The Association could help to develop new quarries by using geologic techniques to locate the deposit, employing heavy equipment for removing overburden and blasting if necessary. In this way, all quarry operators would be able to use equipment owned or leased by the Association instead of investing in heavy equipment individually. This could result in substantial savings in the long run and would also be more efficient.

(7) The Association could develop an inventory system for all quarries in the area and would therefore be able, if contacted by a stone dealer, to tell him what was available and where he could obtain it. This would tend to level out the work load and make commitments for delivery more reliable. Another factor of importance would be that the Association would sanction only those quarries that meet its standards and would publish a list of these quarries which would accompany any personnel promotion literature which, for example, might be sent to stone dealers throughout the area. This would stem the flow of poor quality stone out of the area and also serve
a secondary purpose of insuring a large membership to the Association which would provide financial resources for the Association.

The above proposals should be seriously considered by the Pennsylvania Bluestone Association if Pennsylvania bluestone is to become a viable factor in the dimension stone market. The Association, of course, is set up for the benefit of the quarryman in the area and would be able to perform many of the functions the quarry operator simply does not have the time or money to accomplish. One of the major problems would be the initial financing for the Association. Possibly this could be obtained from the state which often gives financial assistance to small industries.

Managers of bluestone quarries that account for the majority of production must be behind the Association if it is to function properly. It would seem likely that those who are part-time producers would not be interested in such an Association, but it must be remembered that if a strong bluestone industry is to develop some marginal producers will naturally be phased out. This is a fact of life. As it now stands, some definitive action should be taken on the part of the Pennsylvania Bluestone Association in light of the results presented in this report.
LIST OF REFERENCES


Pennsylvania Bluestone Association, Personal Communication.


