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KOSOVO

CLUSTER AND BUSINESS SUPPORT PROJECT

Wood Processing in Kosovo

Secondary Manufacturing, Sawmilling and Dry Kilns

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PURPOSE OF THE ASSIGNMENT

The secondary manufacturing and sawmilling dry kiln consultant will be responsible for providing technical assistance in reviewing current business operations, and working with industry producers to implement standards to make domestic products more competitive with imports, and for the export market.

BACKGROUND

The principal wood products produced in Kosovo are furniture, doors, and windows, with manufacture of other products such as fencing material, pallets, boxes, dimension and prefabricated components limited or non-existent.

The primary millwork products within the secondary manufacturing are doors and windows and other wood products for construction. The cluster has enough capacity to meet market demand with the potential of expanding into export markets. There are several private enterprises as well as SOE's that could be important players; however, observations indicate production of doors and windows has been for a domestic market and only minimal for export. When compared, Kosovo producers use poorly manufactured raw materials with the end result that windows, doors and millwork from Kosovo producers have low customer appeal and can compete only as low-end products.

The quality of millwork production is adversely affected by the lack of quality kiln-dried and surfaced lumber from producers in Kosovo and millwork from Kosovo has a greater tendency to warp and be uneven. Quality must be improved if exports are to be marketed, and until improvements are significant, European imports are likely to dominate the high-end of the market. The demand for roofs and windows for post-war repair and reconstruction of apartments and houses has slowed; however, domestic demand in this area is high because of the current new construction in the commercial sector and the accepted practices of home construction where large homes are completed as funds become available.

As a subset of the secondary manufacturing sector, there are several enterprises engaged in cutting or milling lumber, with most, if not all "live sawing" without regard to established grade recovery practices (i.e. turning logs during the cut process, in order to recover more high-grade timber). A substantial amount of low-grade hard wood is also used for firewood.

Most of these mills are small informal operations with insignificant production capacity, which is low, in part, because of the number of operations with integrated manufacturing facilities where a substantial volume of lumber production is not sold outside the mill, but transferred to utilization by an integrated processing operation. The larger socially owned sawmills are integrated with logging operations, having sawmills that do have integrated wood products manufacturing facilities. This integration is less prevalent among private sawmills, although some private managers have expressed a desire to vertically integrate if adequate financing for expansion were available.

Because of the deficiencies in existing kilns and surfacing equipment, mills are generally unable to produce such value-added items as pre-cut dimensions, wood frames, flooring, or structural members to international standards. Essentially, most sawmills in Kosovo only saw logs into rough, mixed grade lumber, and do not appear to recognize, or have not yet explored, the potential value of waste products from lumber production, i.e. sawdust and wood chips. In some cases, however, these by-products are used as fuel to fire boilers providing steam utilized in dry kilns.

The domestic demand for wood frame housing is low because of demand for traditional preferences for masonry and concrete homes. However, there is strong international demand for pre-fabricated components, and with improved quality this market has some potential.

Because of the level of the populations' purchasing power, and given the small size of the region, Kosovo manufacturers should remain export-focused if they are to evolve and be competitive. With access to Western and Eastern Europe as well as the Middle East and Mediterranean countries, Kosovo is well situated geographically for trade. However, without good transportation including the railroad and port access, expansion into these export markets will not be without significant challenges.

Low labor productivity, relatively high costs of imported materials, and low capacity utilization (i.e. high fixed costs) combine to make furniture and case goods produced in Kosovo overpriced in comparison to competitors. Many managers of Kosovar companies have not acknowledged the new economic reality and are still measuring operational success by production volume rather than by profitability. Kosovo's producers have grown accustomed to a localized market willing to accept expensive, relatively well-manufactured furniture; however, if they intend to become competitive in the export market, given the increasing world capacity in furniture and case goods production, they must strive to produce top quality products while offering competitive pricing.

With over four million kitchen and bath casework sets sold on the European market every year for a combined value of \$12 billion, currently this market may be too demanding for Kosovo manufacturers, but other options could be explored with less demanding buyers in Russia and Bulgaria.

The market for semi-finished components offers new growth potential for kitchen and bathroom furniture manufacturers (cabinet doors, semi-finished panels, work tops, drawers). At present, Germany and Italy are among the largest importers of these components.

There is also approximately a \$9 billion European office furniture market, with Germany, Italy, France and the UK controlling over 70 percent of that market. Quality exports into this market area by Kosovar producers are also worthy of exploration.

There is limited international trade in doors and windows and other wood products for construction, since the Slovenian manufacturers already export into the Balkans producing to some form of standards, building codes, regulations and specifications established there. There may be a specialized custom market in Europe for labor-intensive solid wood doors, and there may be some potential for exports of windows and doors to other Balkan nations and Russia. However, for the most part, without conformity standards for all materials the manufacturers of these products in Kosovo are unprepared to export into markets that demand higher standards of quality, or to effectively compete in the local market with higher quality imports.

FIELD ACTIVITIES TO ACHIEVE PURPOSES

Over the 21-day assignment period, the consultant met with pre-selected wood processors to discuss their current processing techniques versus industry best practices that could have potential impact on operations and manufacturing improvement, product quality, profitability and marketability of present product lines. Many, if not all, of the recommendations and projected timelines this consultant made while developing the 2003 Action Plan for the former Kosovo Business Support project are not only still relevant today, but will remain so for several years, as the industry continues to develop.

In order to propose a successful program of assistance across the entire industry spectrum beginning with the forestry and primary processing levels, and including individual manufacturers of cabinetry, furniture, wood windows and doors, architectural millwork, the Association of Wood Processors in Kosovo (AWPK), academic, regulatory and compliance agencies, the consultant provided cursory assessments, which, based on this SOW, provide recommendations for ongoing implementation activities that include introduction of alternative product lines for existing manufacturers.

Since assessment and implementation time for this assignment was limited; the consultant has opted to respond to each area in a bullet point format, detailing recommendations and the need for additional intervention by task. Due to the extensive and voluminous nature of reference material, all deliverables and industry specific data are provided as addenda in CD format that is included with this report.

TASK FINDINGS AND RECOMMENDATIONS

Task 1 - Identify potential new export and domestic markets with products manufactured to meet customer demands.

Findings/Recommendations:

Requires review of current market analysis that outlines consumer demands for potential export and domestic markets. KCBS should acquire copy of current market analysis from a reliable source, or arrange to conduct an in-depth study of current markets for all product lines. The AWPK could be encouraged to undertake such a project as a fee generating activity, possibly supported by a grant from the KCBS project.

Although seen as a significant marketing tool, length of time required to identify potential new export and domestic markets and/or products will depend upon the scope and focus of the current analysis as provided for these markets. It is another project that could be undertaken by KCBS in cooperation with AWPK, Ministry of Trade and Industry and local/regional Chambers of Commerce.

Task 2 - Work with pre-selected companies in both the 1) doors & windows and other wood products for construction, and 2) case goods sectors, to identify and recommend technology improvements to facilitate production of standard sawmill products.

Findings/Recommendations:

KCBS or AWPK should undertake to provide information regarding any “standard” sawmill products currently produced by, or for, the pre-selected companies referenced in categories 1 and 2 above. This requires a detailed analysis of each operation and their specific product lines to determine the optimal materials necessary to produce quality products. In order to illustrate basic requirements for adequate design and implementation of a successful wood processing operation, a general plan for “facility and process design” including a synopsis of general management training is included in the deliverables addenda of this report. A program of ongoing expanded management focus for local processors must include:

- A comprehensive initial critical facility analysis with follow up analyses to measure progress
- Production, machinery and operations improvement techniques and practices – based on each manufacturer’s product line, financial and technological capabilities
- Raw material and finished goods inventory analysis and control procedures must be proposed and monitored
- Safety, health and environmental issue training
- HR staffing and training
- Accounting & marketing analysis and training. Accounting to include production analysis, purchasing, cost accounting, yield and recovery analysis; marketing to assist with brand recognition, and identifying market and consumer demand for individual product lines, including any potential for export

Depending on the number of pre-selected companies in categories 1 and 2, a detailed onsite production analysis should then be performed for each operation to identify and recommend product and facility-specific technological improvements. This is a process that will require extensive time with each processor to determine financial, production,

management and market capabilities, based on current and future manufacturing requirements.

KCBS, in cooperation with AWPK, should develop ongoing dialog with local Kosovo and neighboring regional producers of “standard” sawmill products in efforts to improve raw materials for Kosovo wood processors.

AWPK members should participate in establishing an understanding of the need for production of quality products that meet or exceed EU standards, addressing difficulties facing the businesses in Kosovo and participating in establishing an understanding of the need for production of quality products “Made in Kosovo”.

AWPK will need to address both macro/micro economic issues currently facing all the manufacturers. These issues include, but are not limited to, import/export taxes or fees, transportation/border concerns, operational taxes, how product standards can meet or exceed EU requirements, exploring alternate financial sources, manufacturing/operational improvements, market research and product development.

Task 3 - Develop proper preventive maintenance procedures for machinery, equipment, rolling stock, tools and tooling.

Findings/Recommendations:

The consultant conducted three 2-hour seminars, attended by a representative cross-section of wood processors with discussions focused on the basics of how a preventive maintenance program including lock out/tag out procedures for manufacturing equipment and machinery will benefit their operations. (a copy of the Preventive Maintenance presentation and a PM Terminology Glossary is provided on the Annex CD)

Development of appropriate “facility specific” preventive maintenance programs, will require extensive onsite assessments for individual production, plant and site operations, including detailed inventories of production machinery, equipment, rolling stock, tools and tooling, and current preventive maintenance procedures, if any, based on operational requirements, production capabilities and machinery manufacturers.

Task 4 - Develop procedures to improve the quality of locally produced finished products. These include raw materials, material handling and processing, and storage.

Findings/Recommendations:

In order to develop comprehensive facility specific procedures, detailed assessments of raw materials, material handling, processing and storage current used in manufacturing of locally produced finished products must be accomplished. Again, an intensive assessment process requiring in depth operations, management and facility analysis for each manufacturer, a process that will require extensive long term work with each processor to determine financial, production, management, implementation and market capabilities, based on current and future manufacturing requirements.

Information is provided in the Annex CD, which defines “best practice” quality processes for sawmilling, dry kiln operation, air drying, lumber grading, storage and optimal usage of raw materials in the manufacture of quality products. Facility specific intervention will require intensive analysis and hands-on expertise as described above coupled with a consistency in follow up operations to insure progress with recommended improvements.

Task 5 - Identify potential capital equipment improvements based on potential expanded production and product capabilities and to improve finishing capabilities and processing of raw materials (e.g. proper storage of lumber inventory).

Findings/Recommendations:

In order to identify and recommend necessary facility specific capital equipment improvements, if any, an in depth facility analysis will be required, to include a current production and financial capability analysis for each operation, defining potential product and market expansion, current inventory storage procedures, processing, finishing and shipping capabilities – each facility is unique.

Use of the “best practice” video library may be of significant value for illustrating proper processing and finishing techniques, lumber inventory, and storage procedures. An index of videos is provided in the Annex CD.

Task 6 - Develop standards for higher quality materials for local customers who in turn will produce higher quality products to compete with existing imports and to improve their potential for exporting into other markets.

Findings/Recommendations:

Lack of availability and usage of quality kiln dried lumber is still seen as one of the single largest impediments to the processors overall ability to manufacture products meeting quality norms acceptable to local and regional consumers or for export to Europe. Commercial dry kilns and planing mills could evolve as a much needed sub-sector. It should be developed using current technology to serve most of the sawmills producing green lumber within Kosovo, and any green lumber imported to meet demands created by other sectors for different species not currently widely available. Detailed information is provided on the Annex CD, including the USFS/FPL Dry Kiln Operators Manual, dry kiln scheduling, optimal drying techniques and post kiln yard storage.

There should also be a strong movement towards immediately adopting and/or adapting European or American standards for most, if not all wood products produced in Kosovo. Such a project could be undertaken by the AWPK, and is in line with goals and action items in their Strategic Plan. A review of information regarding current quality of materials provided to and used by local “customers” should be accomplished, so certain quality norms can be determined based on each manufacturer’s operational and product requirements; which, in turn, may enable them to better compete in existing markets and potentially export into other markets.

There is substantial international demand for wood products that are either not currently manufactured in Kosovo, or are manufactured only in limited quantities for local markets. A feasibility study would be necessary to establish the potential markets and economics for the development of alternative wood products such as:

- **Pre-cut pallet stock.** Given labor costs, the requirement for less sophisticated production equipment and the potential abundance of lower grade lumber, this would seem to be a feasible market for Kosovo enterprises. Due to pallet usage, Western Europe, Russia and the NIS would be the most logical target markets.
- **Beech flooring.** In demand in the U.S. and Asia. Quality dry kilns would be helpful for accessing this market, but even now mills can supply cut-up elements of the heavier parquet now fashionable in parts of Europe or develop the production capability to export finished products into these markets.
- **Edged glued panels and finger joint products.** Demand for edge-glued panels and finger joint products are diverse, including use in the manufacture of furniture

components, tabletops, case goods, cabinetry, door and window stiles, and paint-grade molding and millwork. Low grade defected wood waste from furniture and millwork operations can be converted into a viable product line using both hot and cold-press lamination processes. Conversion of normally discarded waste material into edge-glued panels, and finger-joint blocks, could offer diversity in the product line, while initiating cost savings through utilization of waste or “fall-down” materials. The availability of lower grade lumber could also encourage production of panels and blocks in a high-volume secondary manufacturing operation.

- **Engineered Wood Products – Glue lam & micro-lam beams, manufactured roof trusses.** Although these products are not readily utilized in the construction industry in Kosovo at this time, these products have potential, given proper market development and establishment of the manufacturing technology, and are globally accepted as state-of-the-art roof trusses, header stock and floor joists.
- **Shavings – Sawdust – Chips.** As the industry continues to develop and current manufacturing facilities increase production, there would be certain volumes of secondary wood fiber as by-products that could be utilized for different types of products.
 - A developing saw-milling sector could potentially provide secondary wood fiber as products for paper pulp, pressboard or Medium Density Fiberboard (MDF), flake board, oriented strand board (OSB) or a variety of other products.
 - Currently, just a few of the sectors’ manufacturers are utilizing secondary wood fiber to manufacture heating briquettes into an expanding market.
 - Others are utilizing this fiber to fire boilers for kiln drying lumber.

Task 7 - Develop and introduce industry standards for certain types of wood products and certification standards for industry professionals.

Findings/Recommendations:

Consistent application of designated norms across the industry:

Window and door manufacturers are facing a barrier to competitiveness since most are voluntarily manufacturing to at least the former Yugoslav norms and some to EU standards; where this proactive measure helps to regulate product quality, it also tends to increase production costs. The difficulty exists where the mass majority of small producers do not manufacture their products based on any norms, but simply by past customs, habits and tradition. With the primary producing companies active in industry working groups and many members of the AWPK, they will drive an initiative, via their professional association, to mandate relevant industry norms for products sold in Kosovo. The adoption of such norms will make product certification mandatory, subsequently providing quality products for regional markets and making them more competitive against imports currently being sold into Kosovo.

There are some primary inconsistencies that have, in the past, worked to the benefit of local manufacturers as they developed, but now these inconsistencies are seen as potential threats to their future growth as well. The most important issues are:

- 1) Market development due to the reconstruction efforts caused an inflated market demand. The more aggressive companies located in the larger municipalities had existing base markets making it easier for them to capitalize on the reconstruction program and distribute products into their local market. In 2003/2004, with the major donor funded reconstruction programs completed, these companies found

it necessary to expand beyond their customary markets reaching out to smaller towns and villages. With primary companies producing products to higher standards and costs, this market shift proved difficult since there are enumerable well-established small family wood shops effectively operating in these markets. Now quality as well as price is an issue for continued growth. Aggressive advertising has enabled increased sales into these smaller markets, but a certified standards quality program would level the playing field for the smaller village wood shops and for reducing reliance on imported products.

- 2) Imports are manufactured to various European norms dictating “standard sizes”, but in many cases these “standard sizes” are simply not applicable for use in the current residential construction market in Kosovo. At present in Kosovo, there are no architectural or engineered “standard sizes” designated or provided for residential construction. In some cases, even the commercial construction market, depending on the type of building, is neither regulated nor controlled. The “non-standard” factor has actually worked to the local manufacturer’s advantage by allowing several companies in this sub-sector to develop as major competitors to imports, and affording them sufficient time to respond to quality issues when comparing local and import products.

The more aggressively Kosovo manufacturers expand, the more important “certified standard products” become since, in order to enhance their competitiveness in domestic and export markets, they must match the standards of goods produced abroad. This is only the beginning and literally the “tip of the iceberg”. They must continue to develop manufacturing capabilities, new products and improve management techniques to compete with the ever present and continuous stream of imports.

Standards and certification in the wood-processing sector is a two-fold process.

- Furniture and cabinetry manufacturers generally comply with voluntary quality standards established by bodies such as professional manufacturing associations in the EU, UK and USA, responsible for establishing certification and testing criteria for imported/exported products.
- Mandatory standards imposed for products manufactured for use in homes and public buildings are established and enforced by local regulatory agencies, primarily aimed at addressing safety and health issues, such as fire retardant fabric or foam, ergonomically designed products, and products manufactured specifically for child safety.

Standards for window and door manufacturers are contingent upon product certification criteria and installation procedures established by regulatory bodies through the design, engineering phases of the construction industry. Product standards, certification and testing include areas affecting health and safety (glass); heat and energy loss and structural integrity dictated through proper installation practices.

There are approximately 200 EN product standards relative to the wood processing industries. 80 of the most sub-sector relative standards have been selected and included on the Annex CD. Cost to purchase copies of all 200 EN standards is approx. €9,000, which could be acquired as part of the KCBS grants program with the AWPK becoming a repository for all standards information that could then be made available to all wood processors as part of another fee-generating activity.

Presenting logical concepts of the need for product standards and the certification of products and technical professionals, how these processes could be monitored through the AWPK, as part of their Strategic Action Plan; and how standards implementation relates to overall market penetration and competitiveness would serve as another priority point of intervention for USAID and KCBS.

KCBS should assist AWPK to develop a detailed list of the specific wood products and industry professionals to be considered industry certifiable. In the wood processing industry, certification is generally applicable to technical trades, such as hardwood and softwood graders, dry kiln operators, sawyers, saw filers, millwrights and maintenance professionals. At present there are limited resources for enabling a certification program in any of the above trades, however, enhancing university and wood college curricula, enlisting assistance from machinery and tooling manufacturers, and utilizing US and European wood industry professionals as in-country trainers would seem the most advantageous resource development. In the future, as a fee-generating opportunity, AWPK could take on the responsibilities for developing a trades certification and compliance monitoring program, a recommended goal for their Strategic Plan.

In addition to trades certification, the entire wood industry sector would benefit greatly from a wide array of general business assistance, which could be provided by local consultants and by enhancing institutional curricula.

Task 8 - Develop a higher quality of wood raw materials for local customers to enable local manufacturers to compete with existing imports and to improve their potential for exporting into other markets.

Findings/Recommendations:

Quality norms for materials required by each wood processor is not a “one-size-fits-all” concept; but can only be determined based on each manufacturer’s operational and product requirements, determined through in depth facility, operations, production yield and recovery analysis, level of product quality and market potential. Only after gathering data for the entire industry, could standards be established for inbound raw materials that, when coupled with best-practice manufacturing techniques and effective marketing strategies, will Kosovo wood processors be enabled to better compete in existing markets and potentially export into other markets.

Standards for cut and dried wood products production begin at the forest and sawmill levels, and should emphasize computer-aided processing and decision making in small-log sawing, a process that ultimately affects the overall quality of raw materials available to Kosovo wood processors.

To provide a basic understanding of the process for design, operation, and management of sawmills the section below defines all aspects of pre-operational analysis and management for a new or retrofit sawmill facility that must include the following areas of concern:

- Complete an Overview of the Local and Regional Lumber Industry
 - Lumber Industry and Consumer Profiles
 - Production, Consumption, Trade, and Prices
 - Saw Timber Resource Base
 - Constraints and Opportunities
- Certified Forest Management
 - Recommendations by Forest Stewardship Council (FSC)
 - Determine Official Land and Resource Ownership
 - Develop Timber Harvest Plans for Sustained Yield Management
- Sawmilling Concepts and Techniques
 - Saw Log Production
 - Log Debarking
 - Log Bucking
 - Merchandising

- Saw log Sorting and Green Rough Lumber Production
 - Primary Log Breakdown
 - Secondary Log Breakdown
 - Edging
 - Trimming
 - Sorting
 - Drying of Lumber
 - Processing of Dry Rough Lumber
 - Planing
 - Grading
 - Storing and Shipping
- Mill Design and Location
 - Site Selection
 - Capacity Planning
 - Layout Design
 - Downtime Management
 - Line Balancing
- Raw Materials Management and Requirements Planning
 - Log Requirements Planning and Procurement
 - Log Bucking Strategies and Decisions
 - Optimization of Log Allocation
 - Log Inventory Management
- Equipment Maintenance and Replacement
 - Preventive Versus Breakdown Maintenance
 - Systems Approach to Equipment Replacement
- Performance Evaluation
 - Perspectives and Techniques of Measuring Mill Performance
 - Ways of Improving Mill Productivity and Conversion Efficiency

Task 9 - Develop and introduce industry standards for cut and dried wood products supplied to the wood processing industry, and certification standards for industry professionals.

Findings/Recommendations:

In order to begin a program to introduce or develop product standards and certification for certain technical wood processing professionals, a detailed list of the specific types of cut and dried wood products supplied to the Kosovo wood processing industry and the specific types of industry professionals currently employed by manufacturers would need to be produced. This is a project that could involve surveys completed as part of course work by university and wood college students, or could be a fee-generating project undertaken by the AWPK, who could then maintain the data for future reference.

Copies of the presentations “The A-B-C’s of Standards” and “European Standardization” prepared in part and delivered by this consultant for the prior KBS project are provided on the Annex CD as an illustration of the complex requirements for developing standards in any industry. In addition the NIST Publication 951 – “A Guide to EU Standards and Conformity Assessment” is also provided for benchmarking development, and both hardwood and softwood grading rules and lumber dimension standards from National Hardwood Lumber Association and Western Wood Processing Association are provided separately as globally recognized processing guidelines.

Task 10 - Identify opportunities for clients to partner with retailers who are importing finished wood products to gain a better understanding of the consumer markets, and use this information to expand locally produced products.

Findings/Recommendations:

KCBS should assist AWPK and local wood processors to develop a comprehensive market assessment of local retailers currently importing finished wood products who may be interested in pursuing partnerships with local producers, either on a consignment or direct sales basis.

KCBS should offer assistance to all inquiring local and international investors interested in participating with the KTA (Kosovo Trust Agency) in the acquisition of new companies created from the former SOE's through the privatization process.

Task 11 - Assist Association of Wood Processors of Kosovo (AWPK) on implementing AWPK yearly action plan, with focus on developing and implementing woodworking-training program.

Findings/Recommendations:

The consultant met several times with members of the Board of Directors and various members to discuss implementation of the AWPK Strategic Plan and how to deal with the Plan as an evolutionary tool that should be the medium for informing the membership about changes in the economic business climate in Kosovo over the next 4-5 years. The mission, vision and relevant goals must be overviewed and changed accordingly to reflect economic changes and insure compliance with membership needs.

A relevant source of training assistance remains the World Learning Program. In efforts to assist in development of an effective model for the industry in Kosovo, many individuals from private sector companies engaged in multiple manufacturing disciplines, relevant local government agencies and academic institutions should be encouraged to participate in the program that develops visitation to the US or European manufacturing operations, projects and support agencies to gain "hands-on" experience and exposure to western best practices and procedures. This International Visitors Program includes facility and project visits with possible "job-shadowing" in select wood processing industry sectors.

Task 12 - Assist AWPK with reviewing Strategic Action Plan

Findings/Recommendations:

The consultant met on several occasions with designated members of AWPK to review and recommend potential revisions to the Association's Strategic Plan. The AWPK Strategic Plan revisions were submitted to the membership, and the "Strategic Plan", incorporating those final recommendations for revision is included here in its entirety.

INDUSTRY CONSTRAINTS

Although individual manufacturers within the secondary processing sector have challenges unique to their particular operations, making a “one-size-fits-all” assistance program ineffective, working group discussions indicate these producers all experience many similar constraints that affect the overall industry. Some issues have been significantly alleviated over the past two years due to recent legislation and increased involvement by public sector departments in working group meetings where there is opportunity to gain multi-level awareness and propose solutions to challenges facing Kosovo manufacturers. Additional assessments during this assignment indicate the following issues are still considered primary constraints and business deterrents for Kosovo’s manufacturers in 2005.

In Manufacturing:

- The most significant issue facing manufacturers in any industry is the lack of a consistent supply of electricity to operate their facilities, which adversely affects overall production capacities and is detrimental to machinery due to outages or low voltage power distribution. This will become far more evident and costly as these companies begin installation of updated computerized high-speed technology and overall production levels increase.
- Inadequate or erratic supplies of quality, kiln-dried, furniture grade lumber. This issue is still a stumbling block for local wood processors, but can be alleviated, in part, by inter-country cooperation with Bosnia, Montenegro and Croatia, to request imported lumber that is manufactured to Kosovo processor’s needs. As Kosovo’s sawmill industry comes back online through the privatization process or international investments, there is potential for a sustainable locally manufactured supply, reducing reliance on imports.
- The inability to obtain affordable long-term financing for capital expansion – although recent capital loan programs have been established through Raffeissen Bank, availability is still on a minimal basis; and depending on the credit criteria, the average manufacturer has difficulty in obtaining suitable financing, due in part to a lack of long-term business planning abilities.
- Overall macro-economic issues including the difficulties in securing documents enabling travel out of Kosovo for business purposes, particularly for those with UNMIK passports. Equitable salary, property, VAT and customs taxes – the relaxation of the capital equipment VAT in June 2004 was a significant step to encouraging investment and expansion by local manufacturers.
- Inability to secure international investment or joint venture interest due to Kosovo’s current political status. Several wood processors have noted that incidents of ethnic violence in March 2004 have been identified as a primary reason for the reluctance by outside investors to provide financial assistance at the present time. This factor is forcing some to continue to self-finance facility expansion projects and equipment upgrades, which minimizes available operating capital.
- Manufacturing either to no specific standards or none at all. Once the manufacturers begin to manufacture to these norms, they will be better able to compete with imports meeting those same standards and will gain the potential capabilities for exporting to European markets that require specific standards.
- Inadequate comprehension of domestic or export market demands, trends, sales or marketing concepts – wood processors need a comprehensive market study undertaken.

- Inadequate business and production management skills at all levels of operations.

In Primary Wood Processing Sub-Sector – Sawmills:

- Composed of many small saw-milling facilities with various levels of capacity and technology as stand-alone or captured production operations providing product directly to secondary manufacturers.
- Facilities lack acceptable health and safety practices.
- Inadequate land for enterprises to expand with limited sufficient access to transport routes.
- An assortment of applied technologies at various levels of production creating a potential for a multitude of quality problems that would hamper production diversification and the establishment of industry standards.
- Lack of appropriate collection or disposal systems for secondary wood fiber by-products that potentially could be utilized in other products.
- Majority of the processing technology and production is confined to the State or socially owned enterprises (SOEs).

In the Forestry Sub-Sector:

- Insufficient funding for proper management of timberlands - including reforestation, forest road maintenance, expansion and development of forest roads for harvesting access
- No structured implementation of sustained yield forest management plans.
- Improperly maintained, outdated or a complete lack of technology for harvesting.
- Illegal logging or fire wood harvesting with no means to halt or control the sectors experiencing these incursions.
- Failure by Municipal forests to practice prudent “forest land management”.
- Minimal harvesting due to lack of cash buyers.
- There are 23 recognized forest districts; eighteen are in ethnic Serb areas, while larger municipalities within the Albanian sectors control the remaining five. This forest resource distribution allocates the majority of the resource in the Serbian sectors. It is estimated that as much as 25% of the Serbian forest districts are unmanaged with no legal harvesting activities. Neither sector will transport forest resources across the adjoining sector borders for fear of retribution or the refusal by either group to cooperate in trade.

CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE ACTIVITY

The ongoing objective of the KCBS intervention in the Kosovo wood processing industry should be to facilitate an increase in the quantity and quality of high value wood products produced by local businesses, in addition to facilitating implementation of improvements in wood processing technologies and marketing strategies for domestic and export markets. Continue to resource relevant standards, practices and procedures for the wood processing industry to be presented to all interested organizations, for the specific purpose of designing, developing or adopting standards that will be both EU compliant and relevant to the unique Kosovo business environment.

A significant goal should be to support the fledgling Association of Wood Processors in Kosovo (AWPK) in order to further establishment of realistic goals and guidelines for developing product quality measures, technological requirements, marketing strategies for domestic sales and export markets, and capital improvements needed for sustainable development. As a priority, KCBS, USAID and other NGO's should assist where ever possible to promote quality products "Made in Kosovo".

Full development of the Kosovo wood processing industry, however, requires action on several fronts and is beyond the scope of the KCBS program. However, for completeness of an overview of the future of the industry, these actions are listed below for use in determining future interventions.

- Encourage a movement within the academic community to broaden curricula to include state-of-the-art technological advances in wood processing equipment, processes and procedures.
- Provide assistance to the academic community – particularly the wood college and university level programs – for acquisition of standards, methods and procedures in the native Albanian language. At present few Albanian language textbooks exist for teaching forestry, wood technology, and manufacturing practices.
- Provide technical assistance for identified areas of concern to enable each product cluster to achieve the highest quality production capabilities with existing technology through the utilization of industry sector specialists through demonstration and one-on-one facility specific training.
- Provide assessments of the current levels of industry technologies to assist in developing recommendations for operational improvements, capital investment purchases or company expansion where feasible.
- Provide improved processes by which all enterprises are to be informed of governmental policy, regulations or legislation – a process that should be championed by the AWPK.

To facilitate the process of providing assistance at varying levels of the wood industry sector, a number of initiatives and recommendations should be undertaken over the next few years and they are addressed in two general categories Macro-Economic and Industry and Sector Specific:

Macro-Economic Policies:

Encourage Supportive Government Policy: Policy measures should be undertaken by the governmental entities, with input from the AWPK and wood industry leaders, in order to structure the regulatory process, remove systemic barriers and bottlenecks that impede growth, and encourage the effective utilization of resources and assets which will benefit the entire wood industry sector. These

should enhance a strong tax base providing a continuous revenue stream for the region.

The evolving government in Kosovo should focus efforts to insure that all natural resources are both protected for sustainability and equitably governed to enable utilization that will bring benefits to all of Kosovo. Fair taxation laws for businesses and the people in general would be in the best interest of the region.

Enterprise owners indicate that even under the current business climate and due to the tax structure in Kosovo, the practice of tax evasion is still commonplace and deemed necessary by some as a means of business survival. This practice, specifically, false valuation of assets and sales, is counterproductive to a healthy, growing economy. It has been proven that when government takes steps to afford business tax relief through rate reduction or offering development incentives, strives to eliminate corruption in the system, and creates a fair level playing field, there is far less abuse of the system, more jobs are created, and businesses become competitive, producing a consistent tax base and revenue stream. It has further been noted that black market conditions are often a result of systems similar to those present in Kosovo today.

Enlist Development Assistance from the Banking and Financial Community: A change in the attitudes of lending institutions towards wood products manufacturers is imperative and local banks appear to be responding to that demand. Banks must be willing to become long-term partners in generating the capital required to enable this industry to develop and grow as a revenue-producing sector of Kosovo's business community. Based on commentary by SME principals and financial managers, loans must be disbursed in a timely manner with consistent approval criteria and merit in order to be an effective development tool. These funds must be approved under consistently applied credit criteria and disbursed quickly and not held in suspense for long periods of time.

Assist in Development of Long-term Capital Equipment Loans: Long-term loans or equipment leasing programs must be developed and made available for start-up operations, facility upgrades or expansions. Payback schedules need to be tailored to provide reasonable time for operations to effect construction, upgrades and equipment placement, as well as allowing sufficient time for production to resume before payments begin. Disbursements could be made on a draw versus completion basis, similar to industry accepted construction loans as practiced in the United States, and should be structured for payback over the life of the equipment.

Assist in Developing Short-term Operating Capital loans: There is an immediate need for disbursement of lower interest, short-term loans for working capital. These loans, in conjunction with long-term capital for equipment or facility loans, would enable businesses to gear up production capabilities, creating more jobs and enabling these SME's to become more competitive for both domestic and export markets, and generating a positive impact to Kosovo's tax base.

Encourage Availability of Loans for Technological Advancement: Producers and manufacturers in the wood products industry, in any country, require substantial cash flow in order to operate effectively, continuously improve production and quality, and to remain competitive with other producing countries. In Kosovo, that requirement seems even more evident, due, in part, to the former civil conflict that has been detrimental to the economy and to the general lack of technical and market development of the industry as a whole.

Lower interest short-term and long-term loans will need to be made available for technology upgrades required to provide more state-of-the-art environmental and safety compliant equipment, in addition to equipment intended to reduce labor-

intensive processes, and to implement new construction and facility upgrades to accommodate a technologically advanced industry capable of competing in a global economy.

Industry and Sector Specific:

Initiatives should be taken which afford financial assistance and technical expertise to enable further development of the individual enterprises in those cluster groups comprising the wood industry sector domestically, and in the areas of manufacturing that have either not been explored or may not yet be competitive on the world market.

Forestry: This industry sector will probably remain much like it is currently structured. Public sector organizations will continue to be responsible for designing, implementing and enforcing forest management plans and practices, which again, should include sustained yield cutting practices and aggressive reforestation programs insuring long-term benefit to the entire processing industry. In the event that Kosovo “forest districts” become viable suppliers to the wood-processing sub-sector, effective policy development must:

- Facilitate development of sound management practices for forest, watershed and silviculture
- Facilitate implementation of sustained yield timber management plans
- Develop environmentally sound logging practices and operations
- Establish and enforce annual allowable cuts, cut schedules and logging quotas
- Develop and maintain an aggressive reforestation plan
- Encourage development of Sustained Yield Certification

Forests in Kosovo do not currently possess internationally recognized certification for sustainable forest management, which can be a valuable marketing tool for all end products sold in European markets. Due to the number, diversity and variety of the challenges facing each of the forest districts, a more detailed study by a forestry specialist should be accomplished in order to ascertain, in detail, the particular requirements needed to develop an action plan specific to this sub-sector which would benefit the wood processing industry as a whole.

Both the forestry and the sawmill sectors of the wood processing industry are underdeveloped and comprised of many smaller forest management units and manufacturing enterprises with limited influx into the overall domestic markets due to existing ethnic sector divisions, fear of traveling in each others sectors and the refusal of either group to cooperate in trade. The forestry and sawmill sectors have developed around local demands primarily for single or limited end user markets. They tend to be local businesses with primary impact on local markets with little to no impact on overall domestic or export markets.

Commercial Dry Kilns and Planing Mills: This aspect of the wood-processing sub-sector is an integral part of manufactured goods, and should be addressed. The industry needs to engage sector specialists to undertake the following:

- Develop and implement proper sawing procedures for utilizing raw materials effectively and for sawing for grade to increase lumber value for resale.
- Develop and implement proper procedures for lumber packaging in preparation for air / kiln drying.
- Develop and implement proper storage and inventory procedures for air / kiln dried lumber.

- Encourage development of commercial dry kiln and planer mill operations to facilitate availability of quality lumber for local manufacturers, eliminating the need for reliance on imported green lumber from neighboring countries.

Manufactured Goods: (Windows and Doors, Furniture, Cabinetry and Case Goods). The three product areas that demand focus are windows and doors and furniture. The industry needs to engage sector specialists to undertake the following:

- Recommend improved production systems to promote the manufacture of quality products.
- Identify production process improvement and new product development.
- Develop quality assurance programs for the manufacturing process and end products.
- Identify the potential for product diversification into compatible products, alternate products and markets to increase competitiveness.
- Identify equipment to improve current operations or to increase production capacities and product diversification.
- Improve facility management, operations and maintenance improvement.
- Develop options for job training initiatives for new or upgraded production equipment and processes.
- Facilitate market development for existing and new products within the local and export markets.

Continued Development of Association of Wood Processors In Kosovo (AWPK):

KCBS specialists should continue interactive work with the AWPK and their “working groups” to provide ongoing technical support and assistance in developing good manufacturing processes and practices within Kosovo’s established wood processing industry. Afford the AWPK “working groups” access to information about requirements for the industry in development of quality control standards, technological implementation, marketing and public relations, organizational development, product line management and quality assurance.

Development of sound business management practices: KCBS should encourage the development of Business Service providers [BSPs] to provide an ongoing level of assistance to manufacturers in business management, including business planning, short and long-term tactical planning, development of effective organizational structure, operating budgets, accounting and payroll systems, cash-flow analysis, purchasing, production and inventory cost control management and analysis, marketing and logistics.

KOSOVO

CLUSTER AND BUSINESS SUPPORT PROJECT

Wood Processing in Kosovo

Secondary Manufacturing, Sawmilling and Dry Kilns

Annexes

Annex 1 – AWPK Strategic Plan

Annex 2 – Company Profiles for 12 Pre-selected Companies

Annex 3 – Consultant Resources and Project References

Annex 4 – List of Additional Information provided on CD

ANNEX 1

ASSOCIATION OF WOOD PROCESSORS OF KOSOVO

STRATEGIC PLAN

Association of Wood Processors of Kosovo (AWPK) was established in 2004 as a supportive industry organization comprised entirely of voluntary membership by wood processors from all facets of the industry with common interests in furthering the development of the wood processing industry in Kosovo.

The Strategic Plan represents an evolutionary tool for assisting continual development of the AWPK, for directing the association's focus over the next four year period, and for defining the primary purpose of AWPK as a collective voice in promoting common business interests, to enhance knowledge and application of AWPK members' products, to offer to the wood processing industry, a medium for pooling resources to address wood processing industry problems, influencing positive impact at legislative and regulatory levels and to improve products, methods and productivity for all wood processors in Kosovo in the future.

AWPK anticipates significant changes in Kosovo's business environment over the next four years. This Plan is designed to incorporate critical elements of the initial development stages of AWPK, and integrates assumptions based on the projected business and economic environment by year end 2009:

Some critical industry relevant assumptions may include:

- Domestic manufacturers will endeavor to compete with importers.
- Domestic and export markets will grow; there will be increased export potential to regional and European markets.
- Availability of domestic raw material – particularly timber – will continue to impact competitiveness in regional and export markets.

The AWPK Strategic Plan will be used to measure the association's development progress and allow for continuous monitoring of performance by AWPK, enabling achievement of goals and strategies based on impact to the industry in the projected business and economic environment as is anticipated over the next four year period.

PURPOSE

The key function of AWPK is to become a collective voice in promoting the common business interests of the Kosovo Wood Industry, to enhance knowledge and application of AWPK members' products, to offer to the wood processing industry, a medium for pooling resources to address wood processing industry problems, influencing positive impact at legislative and regulatory levels and to improve products, methods and productivity for all wood processors in Kosovo in the future.

VISION

By 2009, AWPK will be recognized as the principle industry organization with a network of strategic alliances to empower, promote and expand the wood processing industry in Kosovo. AWPK will endeavor to shift from a dependence on institutional grants from donor agencies to a financially autonomous organization supported through membership fees, and

eventually creating sustainable growth through fee-generated services provided for the wood processing industry in the public and private sectors.

MISSION

- To establish manufacturing product quality certification program under which the member companies will be expected to produce wood products and provide related services.
- To become the certification body and industry monitor for member company compliance with manufacturing and quality norms
- To encourage membership and concurrence with AWPK goals and strategies by all wood processors in Kosovo
- To enhance knowledge of state-of-the-art industry manufacturing processes, procedures, and methods that may positively impact the productivity and future competitiveness of Kosovo wood products manufacturers.
- To lobby for a favorable regulatory and fiscal environment with local and regional legislative bodies – including VAT, customs and regional Free Trade Agreements.
- To support industry relative educational programs
 - a. At the institutional level where there is considerable interest in wood processing
 - b. Encourage enrichment of current curriculums focused in wood processing related trades, including management and business operations
 - c. Encourage research and development projects of potential value to the wood processing industry in Kosovo
- To provide all member companies access to industry training at the professional and technical levels for utilizing seminars, on and offsite training by donor sponsored specialists, and through such donor sponsored projects as the World Learning Program.
- To promote, develop and facilitate AWPK administered professional and technical industry training programs designed to enhance and improve management, marketing and operations skill levels of wood processors in Kosovo.

AWPK STRATEGIC GOALS

Goal #1:

Establish manufacturing, product quality certification program under which the member companies will be expected to produce wood products and provide related services.

Objective: To bring together all AWPK member companies, who will by consensus establish consistently applied industry sector and sub-sector norms for product quality, by which all “Made in Kosovo” wood products will come to be known and marketed.

Strategy 1:

- Define an appropriate method for identifying “what will be an applicable set of product norms” for the wood industry in Kosovo, developed or adopted using established standards and norms set by the EU, CEN, BSI, ICBO and/or ISO as guidelines
- By member consensus, (using working groups or designated committees) establish those product norms by which the member companies will be expected to produce products and provide any related services – these include the areas of:
 - a. domestic and imported lumber materials for construction and wood processing
 - b. imported components used in manufacturing of products
 - c. imported materials utilized in secondary manufacturing for products
 - d. product representation by retailers – promoting “Made in Kosovo” products
- Work toward eventual development of a product certification program and to become the certification body and industry monitor for member company compliance with manufacturing and quality norms by which the member companies will produce wood products and related services.

Strategy 2:

- Create an accurate and comprehensive database of the entire Kosovo wood processing industry from forestry through end processors
 - Current and former SOE’s and POE’s
 - Forest enterprises
 - Sawmills
 - Large scale processors
 - Small and Medium Enterprises
 - Privately owned processors
 - Job shops
 - Custom woodworkers
 - Lumber Suppliers (in Kosovo and neighboring regions)
 - Retailers and Wholesalers
 - Reference contact data for relevant industry trade associations in neighboring countries, Europe, UK and the US
- Establish working group or committee to begin compiling, categorizing and describing wood industry related nomenclature for a database including:
 - a. Wood processing activities in Kosovo
 - b. Wood products manufactured and sold in Kosovo
 - Currently and formerly produced
 - Potential alternative product lines based on manufacturing capabilities and regional demand
 - Imported products
 - c. Wood processing machinery
 - Machinery currently in production
 - Machinery available for sale or trade

- d. Wood processing professionals
- Design Wood Processing Industry database
- Identify internal or outsourced candidates/firms with expertise to design, implement and maintain the AWPK database
- Engage external sources such as NGO's or students to collect field data for AWPK database from throughout Kosovo and surrounding regions.
- Compile questionnaire and promotional form for inclusion with AWPK membership application and entry into database
- Inform AWPK members and other interested parties about the database and its potential benefits for developing cooperative linkages and use as a marketing tool

Strategy 3

- Create a Website for the Association that will become a link with other regional and global associations, will help to promote Kosovo wood processors and quality "Made in Kosovo" products.
- Webpage development will tie into creation of a comprehensive database of wood processors and could use the www.fordaz.com web site as a model for generating information and services for member companies, while becoming a revenue source for AWPK:
 - a. Provide Association background, mission statement, recruiting strategy and membership application information
 - b. Become a repository for member company profiles
 - c. Assist members in developing individual company WebPages
 - d. Establish Links to company WebPages and online product catalogs
 - e. Provide Links to relative industry information
 - i. Equipment for sale
 - ii. Raw materials sources
 - iii. Price negotiations and potential collective purchasing

Goal #2:

Acquisition of selective membership on a regional or referral basis, focused initially on the larger established manufacturers, while permitting membership by smaller interested companies. Encourage "grass roots" participation and concurrence with AWPK goals and strategies by member companies and eventually by all wood processors in Kosovo. Promote AWPK activities to outside organizations at the public and private levels (Chambers of Commerce, relative Ministerial Departments, applicable donor agencies, and other regional industry and trade associations).

Objective: Selectively build the AWPK membership across all wood processing sub-sectors. Promote the strategic Association goals and plans to all interested parties encouraging acceptance by local and regional markets of high quality "Made in Kosovo" wood products.

Strategy 1:

- Establish a membership recruiting committee tasked with responsibilities including:
 - a. Develop a comprehensive industry-wide method for informing all Kosovo wood processors about the establishment of AWPK, promoting the Association's Mission, Vision and Strategic Goals for the benefit of all member companies.
 - b. Develop a campaign strategy to initially recruit larger, well established Kosovo Wood Processors to become active AWPK members empowered to

participate in the development of wood processing industry norms and standards in Kosovo.

- c. The goal would be to utilize a drive-down approach using the larger manufacturers to set norms and trends subsequently encouraging smaller companies to join the movement toward acceptance of high quality "Made in Kosovo" wood products.

Strategy 2:

- Develop partnerships with and solicit any available assistance from other interested persons or organizations able to help in promoting the benefits of AWPK to prospective member companies and to encourage acceptance by local and regional consumer markets of high quality "Made in Kosovo" wood products.
 - a. Establish a working relationship with other similar associations such as DRVO-BiH (Bosnia-Herzegovina) and Slovenski-Hrast (Croatia), LINK (Association of Engineers in Kosovo, etc.)
 - b. Encourage participation by relevant Ministerial Departments (Forestry, Trade and Industry) and potential donor agencies, (USAID, GTZ, IREX, etc.)
 - c. Join forces with American, Kosovo and other regional Chambers of Commerce to identify potential sources for investment partners in the Kosovo wood processing industry where applicable; and to assist with competitive market penetration into other local and regional consumer markets.
 - d. Engage University Faculty and local retailers as potential members and promoters of the AWPK Mission, Vision and strategic goals.

Goal #3:

To enhance knowledge of state-of-the-art industry manufacturing processes, procedures, and methods that could positively impact the productivity and future competitiveness of Kosovo wood products manufacturers.

Objective: To enable member companies to favorably compete with established manufacturers of imported products, and to sustain growth in local and regional markets.

Strategy 1:

- Organize Kosovo Wood Week (potential fee generating activity)
 - a. Wood processing trade fair and relevant seminars
 - b. Regional wood processing B2B
 - c. Provide industry relevant video training program

Strategy 2:

- Organize a Wood Industry Conference
 - Develop participation in round table groups to include professionals from:
 - Architecture, Engineering, Construction
 - Machinery and ancillary equipment manufacturers
 - Inform AWPK members about upcoming regional and global woodworking machinery and wood products industry trade shows
- Visit Wood Processing Associations, manufacturers and retailers in Albania, BiH, Croatia, Slovenia and other neighboring countries

Goal #4:

Lobby for a favorable regulatory and fiscal environment with local and regional legislative bodies – including such macro-economic issues as VAT, customs and regional Free Trade Agreements.

Objective: Develop a level playing field enabling Kosovo wood products manufacturers to compete effectively in local and regional markets.

Strategy 1:

- Compile list of relevant agencies and contacts with influence over the wood processing industry in Kosovo
 - Kosovo Ministerial Departments
 - UN, EU and other donor sponsored agencies with input to the legislative or regulatory process
 - Local and regional financial institutions

Strategy 2:

- Develop and disseminate to the membership any legislation, regulations and local or regional trade agreements affecting the wood industry in Kosovo
 - Appoint a research group to address each sub-sector within the industry gathering information including:
 - Forestry, land, planning, zoning and environmental issues
 - VAT, Customs Inspection, Regulation, and Free Trade Agreements
 - Standards, Certification, Testing and Codes legislation
 - Archive and disseminate all regulatory and legislative information to AWPK members – track changes and keep members informed
 - Review any proposed or enacted wood sector related legislation viewed as barriers to competition and development of the wood processing sector. Record and report any impact to wood processors of those regulations, laws and articles
 - Develop recommendations and lobby for favorable legislation and changes to existing regulations, laws and articles
 - Establish a working group to make recommendations for Free Trade Agreements based on export – import trade analysis data
 - Based on evaluation of the effects of custom tax policies on the wood processing industry, review and lobby for favorable import tax policies governing raw materials and wood processing machinery.

Goal #5:

To support industry relative educational programs:

1. At the institutional level where there is considerable interest in wood processing
2. Encourage enrichment of current curriculums focused in wood processing related trades, including management and business operations
3. Encourage research and development projects of potential value to the wood processing industry in Kosovo

Objective: To provide input to relevant institutions to aid in the development of educational opportunities designed to improve management techniques, operations and general business awareness and specialized training for specific wood industry related trades.

Strategy 1:

- Compile a comprehensive list of all existing institutions and local training facilities in Kosovo and surrounding regions.
 - University level facilities
 - Wood Institutes
 - Outsourced training facilities

Strategy 2:

- Encourage participation by the AWPK member companies, local wood institutes and the university faculty in focusing development of curricula that will be more industry specific for Kosovo
 - a. Operations, Accounting, Business and Human Resource Management
 - b. Trade specific training in and around state-of-the-art equipment
 - c. Hands-on coursework designed to prepare students for specialized certification in wood processing trades as these certifications are implemented

Goal #6:

To provide access to industry training at the professional and technical levels using seminars, on and offsite training by donor sponsored specialists, and through such donor sponsored projects as the World Learning Program. To promote, develop and facilitate AWPK administered professional and technical industry training programs designed to enhance and improve management, marketing and operations skill levels of wood processors in Kosovo

Objective:

Based on a number of macro-economic concerns common with many of the enterprises, taking into account their diverse and sporadic production and financial capabilities, and the general lack of market development for the industry, it is most beneficial to the entire sector to provide multiple levels of technical and professional assistance, beginning with basic business development practices and encouraging entry into the wood processing by Kosovo's youth.

Strategy 1:

- Develop an internship or apprenticeship program using member companies as hosts and mentors for selected University or Wood College students during the summer months. The program could Model the World Learning Program's structured and monitored program with expectations for achievement of specific goals by the students and companies.

Strategy 2:

- The Association should partner with donor agencies, academic institutions, local professionals and consultants to develop AWPK administered professional and technical industry training programs designed to enhance and improve management, marketing and operations skill levels of wood processors in Kosovo.
- Basic management skills
- General business planning
- Organizational structure
- Marketing and market development – domestic and export
- Accounting practices and procedures
 - Accounts Payable
 - Accounts Receivable

- Payroll and Taxes
- Operating Budgets
 - Pro-forma operation statements
 - Financial statements
- Cash-Flow Analysis
- Production and operations principles
- Purchasing
 - Cash Based
 - Lines or Letters of Credit
- Inventory and cost control analysis
 - Raw materials
 - Manufacturing
 - Finished goods
 - Logistics

ASSOCIATION MANAGEMENT GOALS

Objective: To gain local and regional recognition as the collective voice for the Kosovo Wood Processors and to insure financial sustainability for AWPK.

Strategy 1:

- By 2009, AWPK will become recognized as the principle industry organization supporting a network of strategic alliances to empower, promote and expand the wood processing industry in Kosovo. As a collective voice, AWPK will serve as a medium for local and regional industry support and for effecting fiscal and regulatory changes that will be beneficial to the member companies and the industry in general.

Strategy 2:

- AWPK will endeavor to shift from a dependence on institutional grants from donor agencies to a financially autonomous organization supported through membership fees, and eventually creating sustainable growth through fee-generated services provided for the wood processing industry in the public and private sectors.
- Create a fee structure for developing Web Pages, online catalogs and Links from the AWPK Website for member companies
- Develop a fee structure based on a modular approach for providing technical and professional training for member companies
- Once developed, a certification program – AWPK can generate fee based product certification and offer “Made in Kosovo” seals to member companies.
- AWPK could eventually act as an industry consultant offering services to potential investors, vendors and financial institutions (company profiles, market analysis, consumer surveys, etc.)

ANNEX 2

COMPANY PROFILES FOR 12 PRE-SELECTED SECTOR COMPANIES SUMMARIES, ASSESSMENTS AND RECOMMENDATIONS

To stress the need for further intervention with this sector, the following company summaries address specific areas where improvements are needed, even with those companies that have shown significant progress as a direct result of implementation of recommendations presented through the "pilot company" approach developed by this consultant under the previous KBS project - specifically Korenica, Gacaferi, Wood Combine, Mobileria Djelza, Lesna, and Brovina.

Business constraints and areas still lacking appropriate technology as defined in these summaries include:

- lack of quality kiln dried lumber
- proper expansion planning since they still approach things on the "me too" methodology – expanding because they have seen another manufacturer do so
- not installing safety glass in windows and doors where appropriate (most definitely will cause difficulties in exporting to EU countries)
- use of double pane windows, but not Argon gas filled
- use of low quality stains, lacquers and paints for exterior use (they do not primer coat anything for exterior use)
- lack of properly installed finishing rooms
- improper dust and shavings removal systems
- no fire protection in any of these facilities (sprinklers)
- lack of general, operations and financial management skills

As in 2003, all companies complained that VAT, import tax, tax on all salaries or wages paid by company, and disproportionate property taxes are still considered primary business constraints.

All of these companies will require varying levels of assistance and industry expertise in the each of the following areas depending upon their current operational requirements and at what stage of development their facility may be:

- Raw material purchasing, handling, storage and inventory management.
- Processing and procedures to include:
 - Quality control
 - Maximizing current facility technologies
 - Process engineering to improve production techniques
 - Safety and health issues
- 1. Product cost analysis, standardization and pricing.
- 2. Product diversification, where possible, with existing equipment.
- 3. New product development with capital expenditures for market development.
- 4. Market research development.
- 5. Marketing strategies.

It is recommended that KCBS further assess and analyze in detail each client's needs to determine the individual manufacturer's ability to respond to business demands being forced on them by the current post-reconstruction economic climate and, subsequently, how each would best benefit from specific technical industry expertise. Technical assistance and training should be provided at all levels as detailed, utilizing the KCBS local professionals or by acquiring the specific skill sets required through recruitment of industry consultants or volunteers.

Wood Processing Sector Company #1

Company: Wood Combine
Location: Peje
Contact: Agrim Krasnichi Commercial Manager, Pajazit Tolaj Sawmill Manager
Telephone: Office +377-44-142-576, Fax +381-39-34-082
Web & Email: www.zgjimi.com,
Type of Business: Sawmill, component manufacturing
Species: Beech
Products: Kiln dried lumber
Quality: No certified production norms for quality.

Background:

- Wood Combine, a former SOE, is the first of the large, fully integrated wood processing facilities to be successfully privatized.
- A substantial investment has been made by the Albanian-American investors for the purchase of the facility and for implementation of their five stage capital investment plan that includes purchasing state-of-the-art equipment to modernize the production process.
 - Once all planned capital investments are completed, this facility will be the most advanced operation of its type in Kosovo and keenly observed by other manufacturers in the industry.
 - This facility will be a deviation from traditional operations of its type, offering products and services atypical of the old SOE fully integrated production facilities.
 - The success of this company will play a key role in the wood processing industry's development, as it is being observed by all the current major wood processing companies, and will have a major impact on how each manufacturer participates in that development process.
 - It is strongly suggested that intensive assistance be provided particularly during the startup phase for the first year of operation, as many management skills cited in this report are inadequate or lacking totally. Their successful implementation process and startup will have a major impact for the overall industry, could potentially impact import substitution and eventually increase employment

Observations:

- Currently purchasing green beech lumber from local suppliers
- Have set up a shed for stickered green lumber for air drying prior to dry kiln
- Have improved stacking procedures but still need better stickers and placement practices
- Still have some poor lumber handling and storage practices
- Housekeeping is fair

Sales/Marketing/Facility Development:

- The Albanian-American owners and resident management have adopted a strategic plan based in part on recommendations from this consultant while working on the KBS project in 2003/2004. The strategic plan, at present, consists of five development stages with a projected capital investment of approximately 2 million euros. This is in addition to the 2.2 million euros already invested for the privatization of the former SOE. Development stages are:
 - Stage 1: Repair and make operational dry kilns and boilers. Completed at a cost of 50,000 euros
 - Will require preventive maintenance training
 - Will require extensive dry kiln operator training and drying schedule development
 - Stage 2: Installation of a state of the art saw manufacturing and filing room. Completed at a cost of 200,000 euros
 - Will require extensive technical training of existing personnel or recruiting of experienced files and millwrights

- Stage 3: Installation of state of the art primary and secondary sawmills currently on site and being installed. Equipment cost of 300,000 euros
 - Will require development of a production flow analysis and plant layout for optimal production.
 - Will require extensive machine operator and millwright training
- Stage 4: Fingerjoint and gluing operations. They are currently reviewing equipment information resourced at the Milan Machinery and Trade show hosted by KBS wood processing staff and attended by 14 client wood sector companies. No estimate of capital needed for installation which will include machinery and building modifications
 - Will require assistance in developing a comprehensive facility design and plant production layout
 - Will require extensive machine operator, millwright and maintenance training
- Stage 5: This stage is currently very vague. They plan to develop secondary manufacturing of some type, but at this point no specific product type has yet been determined

Business Concerns:

- Contracts for consistent supply of logs have not yet been consummated
- They intend to become the major supplier of quality kiln dried beech lumber for furniture, cabinet, bedroom, window, door manufactures plus produce building materials, where appropriate for the construction industry, but without proper development of product norms, they may have a difficult time achieving this goal
- Lack of any developed marketing strategy is a concern considering the investment being made
- Full spectrum management skills are weak at best and a great deal of intensive guidance will be necessary as outlined in this report

Quality Concerns:

- Discussed the AWPK association and certification program and its importance in assisting them in competing with imports and developing export markets into the EU.
- Agreed a product certification program was needed to increase sales potential in the domestic market by making consumers more aware of quality of locally made products by setting norms or standards using a certification program by which all imports must compare and to which all domestic manufacturers must elevate in order to sell quality products

Wood Processing Sector Company #2

Company: Gacaferi
Location: Peje
Contact: Naim Gacaferi; Mobile 377-44-138-932
Type of Business: Wood products
Species: Pre-painted and printed Medium Density Fiberboard (MDF), beech, pine
Products: Kitchen Cabinet Sets, Wooden Staircases, considering children's bedroom furniture and case goods
Quality: Has acquired norm specifications from Italy and now producing based on those norms

Raw Material:

- Green un-edged pine lumber purchased from Bosnia and beech purchased locally.
- Purchasing specs by thickness and length with little concern to lumber quality (grades).
- Noted that Montenegro allows export of sawn lumber only.
- All hardware is purchased from Italy
- All lumber is air dried on sticks for one year then finished off in dry kiln (capacity 20 cubic meters, two-week drying schedule)
- Pre-finished or printed MDF imported from Italy

Sales/Marketing:

- Production requirements based on walk-in or telephone orders.
- Primary markets Peje and surrounding local villages.
- Constructing an entirely new showroom based on showrooms for similar products in the US (participant in 2004 World Learning IVP program in the US)
- No strategic marketing plan (despite efforts by KBS marketing group), but does minimal advertising at present.
- Has product/sales representatives in 2 other major cities in Kosovo
- With the hiring of a finance & market consulting manager they are striving to bring level of quality up to EU norms with the expectation of shipping into Macedonia, Albania and Serbia. They are currently looking at the Belgrade market with very high interest
- Have a donor willing to share the costs on advertising billboards to be put up at the manufacturing facility and across the street
- Has totally revamped his showroom based on showrooms he saw in US on World Learning tour, and increased its size to include kitchen cabinet manufacturing. Relocating that operation to a solid wood facility located at back of property

Observations:

- Lumber storage has improved considerably and he plans to utilize sticker type stacking seen in US and used for air drying to eliminate sticker stain
- VAT and import tax (without distinction to type or real value) are still major issues
- Italian MDF supplier demands full payment at order placement, but maintains a 30-day delivery schedule. No guarantees if MDF supplier experiences production or export shipping issues – with the pre-paid order there is little or no recourse for claims against the product quality.
- Business loans are still too expensive and short term. They are forced to plan capital improvements out over several years delaying immediate acquisitions that may assist in product development and market penetration
- Inconsistent power supply and high indirect costs are a major manufacturing constraint
- Currently under construction on the solid wood factory site is a building of 480 sq meters (2 floors 960) which will house the kitchen cabinet production. The second floor will consist of lunch room and offices.

Business Concerns and Recommendations:

- Assist in improving a marketing strategy for domestic and export markets by initiating a market feasibility study before employing advertising – potentially available through local consulting firms
- Discussed the AWPK association and certification program and its importance in assisting them in competing with imports and developing export markets into the EU.
- Agreed a product certification program was needed to increase sales potential in the domestic market by making consumers more aware of quality of locally made products by setting norms or standards using a certification program by which all imports must compare and to which all domestic manufacturers must elevate in order to sell quality products

Quality concerns:

- Make training available for addressing health and safety issues; a) waste from processing by-products scattered all about the floor, b) inadequate dust removal system – “best practice” videos might be applicable.
- Address improper storage of raw material - among the deliverables for this assignment are best practices for outdoor storage techniques to prevent material degrade.
- Utilize “best practice” videos and training material for addressing Painting / Finishing rooms that are improperly vented; a) health and safety issue, b) particulates make quality finishing difficult.
- Minimal production planning evident
 - Offer production and operations training
- Machine guards have been removed from several machines
- Work with production management to develop awareness of the safety issues created by removing appropriate guards – get guards reinstalled

Wood Processing Sector Company #3

Company: Brovina
Location: Gjakova
Contact: Afrim Brovina (Member AWPK Board of Directors)
Telephone: Office: 044-182-988
Type of Business: Doors & Windows / multiple specialty products
Species: Oak, Beech and some Pine.
Products: Doors, Windows and Finished Interiors (Installation) Provided CD
Quality: No certified production norms for quality.

Raw Material:

- Green lumber imported from Bosnia 20% Beech, 80% Oak
- Hardware purchased from local suppliers – source unknown
- Lumber purchased by thickness, 2.5cm, 5cm & 8cm with length being 4 to 4.5 m, R/W not edged
- Have their own dry kiln and are now drying all lumber used in manufacturing (a direct result of intervention by the KBS wood team)

Sales/Marketing:

- Referrals and very well-known name – rely on solid brand recognition
- Primary markets are domestic with some exports into Albania for custom made products
- Minimal marketing plan or advertising strategy
- Has built a new showroom on the manufacturing site easily visible from the street
- Now cooperating with Lesna producing components for drop-down stair cases while Brovina sells and has on display Lesna windows
- Brovina is producing the more difficult arched windows and doors for Lesna on an as-needed basis – the linkage with Lesna was a direct result of KBS wood team intervention

Concerns:

- As with visit as early as 2003, VAT, import tax, tax on all salaries or wages paid by company and disproportionate property tax are still considered primary business constraints
- Business is still undercapitalized and business loans are too expensive.
- Inconsistent power supply and prohibitive costs are a major manufacturing constraint.

Business Concerns and Recommendations:

- Assist in developing a marketing strategy for domestic or export markets.
- Work through AWPK to encourage rapid development of certified product quality norms to promote quality products into any market.

Quality concerns:

- Improper painting (finishing) room installation. Provide assistance in redesigning finish room – need to insure contained environment to prevent excessive particulates adhering to stains and lacquers.
- Discussed the AWPK association and certification program and its importance in assisting the manufacturers in competing with imports and developing EU markets
- Agreed a product certification program was needed to increase sales potential in the domestic market by making consumers more aware of quality of locally made products by setting norms or standards using a certification program by which all imports must compare and to which all domestic manufacturers must elevate in order to sell quality products.

Wood Processing Sector Company #4

Company: Mobileria Djellza
Location: Gjilan
Contact: Managing Director Zeqir Rexhepi (Member AWPB Board of Directors),
Owner Naser Veseli
Telephone: Office 044 131524, 044 154 058 Private 028 21 716
Type of Business: Furniture
Species: Hardwoods
Products: Upholstered Furniture
Quality: No certified production norms for quality.

Observations:

- Purchasing green lumber from local supplier
- Improper air drying of green lumber and lack of proper lumber storage (Has not implemented procedures recommended by the KBS wood team)
- Sawn lumber is of poor quality – from both a grade and processing perspective
- 20 employees (previously 35, but has moved 15 to Albania)
- Opened an upholstering facility in Albania to supply that market
- Housekeeping is fair
- Tried expanding into bedroom furniture, occasion tables and chairs
 - Could not compete
 - Could not meet current market quality demands
- Moved sub-frame assembly to another building allowing them to enlarge upholstering area
- Improper dust removal in component manufacturing area
- Improper paint (finishing) room – no paint booths, no dust removal, has quality issues with particulates in the finish
- Still hand carving components rather than buying several types of equipment that will do the same job quicker with more consistency
- Reduced materials and finished goods inventory (now kept in Albania for the facility there)
- Have started to use dowels rather than staples on a couple of the frame joints

Business Concerns and Recommendations:

- Assist in development of a formal marketing plan
 - Help to improve advertising in local papers
 - Improve current brochures and utilize locally not just for trade fairs
- Has 1 retail outlet in Gjilan (had 2 but recently closed one due to lack of sales)
- Increased competition in local markets making domestic sales less profitable
- The buildings belong to a former SOE (poultry operation) and allegedly this facility will soon come up for privatization grouped with several other SOEs. Due to this potential ownership change they have stopped all capital improvements to the buildings, since they don't feel they will be able to acquire ownership.
 - May require some intervention with the privatization process to help with potential financing for acquisition

Quality Concerns:

- Improper painting (finishing) room installation
 - Need direction for redesigning this part of the operation
 - Not in enclosed area causing drying inconsistencies and excessive particulates on surfaces
 - Poor production flow, since finishing area is in a separate building from the main manufacturing facility – forcing movement of product through an outdoor environment before and after finishing
- Still not using kiln dried material for all components
 - Need additional training on benefits of KD material in their product

- Too many staples being used for attaching component parts –
 - Need to improve fastening capabilities
- Their accountant believes in order to keep lumber costs down they must utilize even components that have quality defects, which results in the manufacture of low quality products
 - Need assistance in cost accounting, yield and recovery analysis
- Discussed the AWPK association and certification program and its importance in assisting them in competing with imports and developing export markets into the EU.
- Agreed a product certification program was needed to increase sales potential in the domestic market by making consumers more aware of quality of locally made products by setting norms or standards using a certification program by which all imports must compare and to which all domestic manufacturers must elevate in order to sell quality products

Wood Processing Sector Company #5

Company: Korenica
Location: Rahovec
Contact: Mustafe Korenica (Member AWPK Board of Directors)
Telephone: Tel/fax 00381-29-77-263, GSM 00377-44-158-087
Email: konenica_drupvc@hotmail.com
Type of Business: Windows and Doors
Species: Pine
Products: Wood Windows and Doors, Vinyl Windows
Quality: No certified production norms for quality

Raw Material:

- Imports laminated pine stock from Slovenia for wood window production
- Pre-formed vinyl material for windows is imported from Slovenia
- Oak for the doors is imported from Bosnia
- Glass for glazing windows and doors imported from Turkey

Sales/Marketing:

- Maintains small inventory of commonly purchased windows
- Produces primarily to customer order
- Have brochure of current standard products
- Serves the domestic market with sales locations in Pristina, Prizren and Gjakova
- Has advertised on TV and Radio, but was not satisfied with results; even with sales reps they still just wait for telephone to ring. Has developed web site
- Moved into new production facility which is part of an SOE (winery in Gjakova) relocating the vinyl window production line and the wood door production line
- Have a showroom at wood window facility

Observations:

- Laminated product for windows is of excellent quality
- Housekeeping is very good, but wood door production area is very cramped, which does not allow for adequate production flow particularly if product demand increases
- Inventory is well maintained and managed requiring signatures for material taken for production needs. Only one person has access to the inventory and is responsible for its accuracy (a direct result of KBS wood team intervention)
- Installing a new waterfall type painting (finishing) room so they can meet standards for exporting into Switzerland
- Concerned about what to do with waste water accumulated from paint room operation (it is hazardous material, but there are no means for appropriate disposal of haz-mat substances in Kosovo)

Business Concerns and Recommendations:

- Needs immediate assistance to develop a solid marketing strategy
- Discussed the AWPK association and certification program and its importance in assisting them in competing with imports and developing export markets into the EU.
- Agreed such a product certification program was needed to increase sales potential in the domestic market by making consumers more aware of quality of locally made products by setting norms or standards using a certification program by which all imports must compare and to which all domestic manufacturers must elevate in order to sell quality products
- Recognizes the need for increased quality considering the difficulties they are having in developing sales into Switzerland. Directly related to this is the lack of qualified workers, improved technical production methods and training, as well as improved operational practices

Wood Processing Sector Company #6

Company: Lesna
Location: Pristina
Contact: Hashim Deshishku Manager (Kasabank President and Board Member, AWPK President and Board Member)
Telephone: Fax 00381-38-535-587, Tel +381-38-548-125
Web & Internet: www.lesna-kosovo.com, info@lesna-kosovo.com
Type of Business: Windows and Doors
Species: Pine, Mahogany
Products: Wood Windows and Doors, Vinyl Windows
Quality: No certified production norms for quality

Raw Material:

- Imports laminated pine stock from Slovenia for wood windows and Mahogany from Indonesia for wood door production
- Preformed vinyl material for windows is imported from Slovenia
- Glass for glazing windows and doors imported from Turkey

Sales/Marketing:

- Maintains small inventory of commonly purchased windows and doors
- Produces primarily to customer order
- Aggressive marketing strategy with showrooms and retail sales in most major cities in Kosovo (Peje store soon to open)
- Has advertised on TV and Radio with good results
- The largest manufacturer and distributor of domestically made doors and windows in Kosovo – has excellent brand recognition, in part due to association with a parent-type organization in Slovenia
- Just recently added wooden doors to the product line and production facility

Observations:

- Laminated product for windows is of excellent quality
- Housekeeping is very good with only minor attention needed in the vinyl window facility
- Inventory is well maintained and orderly
- Large glazing room is kept sealed from the rest of manufacturing
- Lumber storage practices need improvement to prevent degrade
- Discussed some observations regarding quality with production manager
 - Hinged screws not flush
 - Color variation particularly in lighter stained products
 - Machining problems centered around distressed wood and wet wood in the system
 - Handling “dings” from moving product through the product process
 - Checks and splits in the wood that should never make it into production let alone to a product ready for painting/finishing

Business Concerns:

- Discussed the AWPK association and certification program and its importance in assisting them in competing with imports and developing export markets into the EU.
- Agreed such a product certification program was needed to increase sales potential in the domestic market by making consumers more aware of quality of locally made products by setting norms or standards using a certification program by which all imports must compare and to which all domestic manufacturers must elevate in order to sell quality products
- Recognizes the need for increased quality considering the difficulties they are having in developing sales into export markets. Directly related to this is the lack of qualified

workers, improved technical production methods and training, as well as improved operational practices

- Owner has been one of the primary driver's behind the AWPK organization, and will remain both a manufacturing and community based advocate for future development and realization of the association's goals. As the president of a major financial institution in Kosovo, he also has the ear of government and regulatory officials, and will be a resource for lobby issues aimed at improving the wood processing industry.

Wood Processing Sector Company #7

Company: Vebi Zhuri
Location: Prizren
Contact: Partner Nazim Ajazaj
Telephone: Office 029 24 095 Mobile 044 118 482
Type of Business: Windows and Doors
Species: Pine and Ash
Products: Wood Windows and Doors
Quality: No certified production norms for quality

Raw Material:

- Import green lumber to their specifications; Ash from Frushka Gora region between Croatia and Fajusdia, Pine from Bosnia
- Kiln dries all material in single on site kiln: 45 cubic meters per month, 7-12 day schedules

Sales/Marketing:

- JIT production schedule based on orders, carrying minimal inventory of standard size products.
- 70% of products standard sizes, 30% custom sizes
- Have brochure of current standard products
- Largest portion of their market is in Kosovo, Albania, Macedonia and just recently started to explore the potential of shipping into Switzerland
 - They have had some difficulty getting the products accepted by the architects in Switzerland due to lack of quality verification or certification
 - They have discovered that the EU markets require product certification with Germany, France and Italy primary developers of those standards
- 3 sales reps in Kosovo, one in Albania and recently added POS (Point of Sale) in Macedonia through 2 wholesale building material companies
- Has advertised on TV and Radio, but was not satisfied with results; even with sales reps they still - just wait for telephone to ring.
- Has developed web site
- Recently moved into new production facility which was under construction during initial sector analysis.
- They have expanded the product show room to include a large portion of what was once production area

Observations:

- Wood resource and quality acceptable, but the sawmill producing the lumber is still not following any norms for the production of properly graded material to meet product manufacturing requirements
- Visited recently completed and occupied manufacturing facility:
 - Housekeeping is very poor or lacking entirely (many safety issues also recognized)
 - Improper material handling and storage
 - Improper product painting (finishing) system used
 - Several product quality issues discussed including wet wood, machining and finishing
 - This company and many others still have no concept of lumber quality and how it directly affects utilization/costs of end product (buying the lowest priced lumber does not necessarily correlate to lower material costs for product manufacture)
- Operating under the myth that newer technologically advanced equipment would make them more competitive.
- Do not understand that utilization of raw materials and machinery, new or old, are key issues facing them at their current production requirement levels

Business Concerns and Recommendations:

- Work with company to develop a marketing strategy
- Having difficulty in competing with imports primarily because consumer impressions are that products made in Kosovo are of lower quality
 - Encourage promotion of quality products by AWPK and local Chambers of Commerce
- Concern over increasing imports from China with lower prices, but also lower quality
 - Another area for cooperative work with Chambers of Commerce and AWPK – establishing marketing campaigns for buying “Made in Kosovo”
- Trying to cut raw material costs by importing lumber of higher quality
 - Considering purchase of Eucalyptus from Vietnam (150 to 210 euros per m3 FOB Vietnam)
 - Cautioned Nazim about downfalls of using “non-traditional” woods in already established markets
 - Importing Red Oak from the United States at what they thought were acceptable prices
 - Cautioned Nazim about just strictly looking at price when considering buying material from the US. Lumber produced in US is done using specified grades for different levels of quality. The prices he quoted to me indicated a very low grade of material which would not be suitable for window or door manufacturing (material yield or utilization would be very low)
- Discussed the AWPK association and certification program and its importance in assisting them in competing with imports and developing export markets into the EU.
- Agreed such a product certification program was needed to increase sales potential in the domestic market by making consumers more aware of quality of locally made products by setting norms or standards using a certification program by which all imports must compare and to which all domestic manufacturers must elevate in order to sell quality products
- Recognizes the need for increased quality considering the difficulties they are having in developing sales into Switzerland.
 - Directly related to this issue is the lack of qualified workers, improved technical production methods and training, as well as improved operational practices – need intervention by industry specialists to improve all areas.
- Macro-economic concerns that can be addressed through lobby groups and the AWPK

Wood Processing Sector Company #8

Company: Modeli
Location: Gjakova
Contact: SOE (Socially Owned Enterprise)
Telephone: Office 390/ 25 603, 27 670, 20 852, 044 122 473, 044 277 177
Email: sha_modeli@hotmail.com
Type of Business: Fabricates Wood Resort Structures (cabins, restaurants, cabanas, decks)
Species: Pine, Ash
Products: Weekend houses, restaurants, cabanas, decks, motel cabins
Quality: No certified production norms for quality

Raw Material:

- Import green lumber to their specifications; Ash from regions in Kosovo, Pine from Bosnia
- Estimated that 90% of the lumber is imported from Bosnia
- 80 cubic meter capacity dry kilns on site, with a current drying capacity of 150 cubic meters per month

Sales/Marketing:

- Production is based solely on orders – need to help develop sales strategies
- Have standard floor plans but most are built to customer specifications
- Have brochure of current standard products
- Largest demand is in domestic sales with product going into Albania
- Little to no marketing strategy or planning

Observations:

- Wood resource and quality is acceptable, but they not producing to any component standards or norms
- Specifications are generally set by customer
- As with first visit VAT, import tax , tax on all salaries or wages paid by company and disproportionate property taxes are still considered primary business constraints
- Current SOE status requires employment of most former employees many of whom lack the appropriate production and manufacturing skills levels
- Based on previous visits there seems to be little real motivation by existing management to pursue privatization
- Operating under the myth that newer technologically advanced equipment would make them more competitive.
- Do not understand that utilization of raw materials and machinery, new or old, are key issues facing them at their current production requirement levels

Business Concerns and Recommendations:

- Assist in development of a marketing strategy to include aggressive sales approach
- Work through AWPK to inform manufacturers of industry developments or economic business climate in Kosovo or surrounding countries affecting the sector
- Do a critical facility analysis to determine how to replace old and/or outdated equipment, so they can take advantage of the latest technological advantages necessary to be competitive – will require access to long-term capital equipment financing
- They have had two foreign companies interested in acquiring the facility - one from US and the other from Norway. These two companies apparently expressed no interest in participating in the privatization bidding process or leasing a facility where ownership is in question. These companies have little interest in commercialization, as suggested by the Modeli's management, due to the lack of expediency and the uncertainty within the privatization process

- Discussed the AWPK association and certification program and its importance in assisting them in competing with imports and developing export markets into the EU.
- Agreed a product certification program was needed to increase sales potential in the domestic market by making consumers more aware of quality of locally made products by setting norms or standards using a certification program by which all imports must compare and to which all domestic manufacturers must elevate in order to sell quality products
- They have an inquiry from a UK company to export wooden houses into the UK.
 - They needed product specifications and it was suggested that they should acquire those from the company making the inquiry

Wood Processing Sector Company #9

Company: Mobileria Djellza
Location: Gjilan
Contact: Managing Director Zeqir Rexhepi (Member AWPK Board of Directors),
Owner Naser Veseli
Telephone: Office 044 131524, 044 154 058 Private 028 21 716
Type of Business: Furniture
Species: Hardwoods
Products: Upholstered Furniture
Quality: No certified production norms for quality.

Observations:

- Purchasing green lumber from local supplier
- Improper air drying of green lumber and lack of proper lumber storage (Has not implemented procedures recommended by the KBS wood team)
- Sawn lumber is of poor quality – from both a grade and processing perspective
- 20 employees (previously 35, but has moved 15 to Albania)
- Opened an upholstering facility in Albania to supply that market
- Housekeeping is fair
- Tried expanding into bedroom furniture, occasion tables and chairs
 - Could not compete
 - Could not meet current market quality demands
- Moved sub-frame assembly to another building allowing them to enlarge upholstering area
- Improper dust removal in component manufacturing area
- Improper paint (finishing) room – no paint booths, no dust removal, has quality issues with particulates in the finish
- Still hand carving components rather than buying several types of equipment that will do the same job quicker with more consistency
- Reduced materials and finished goods inventory (now kept in Albania for the facility there)
- Have started to use dowels rather than staples on a couple of the frame joints

Business Concerns and Recommendations:

- Assist in development of a formal marketing plan
 - Help to improve advertising in local papers
 - Improve current brochures and utilize locally not just for trade fairs
- Has 1 retail outlet in Gjilan (had 2 but recently closed one due to lack of sales)
- Increased competition in local markets making domestic sales less profitable
- The buildings belong to a former SOE (poultry operation) and allegedly this facility will soon come up for privatization grouped with several other SOEs. Due to this potential ownership change they have stopped all capital improvements to the buildings, since they don't feel they will be able to acquire ownership.
 - May require some intervention with the privatization process to help with potential financing for acquisition

Quality Concerns:

- Improper painting (finishing) room installation
 - Need direction for redesigning this part of the operation
 - Not in enclosed area causing drying inconsistencies and excessive particulates on surfaces
 - Poor production flow, since finishing area is in a separate building from the main manufacturing facility – forcing movement of product through an outdoor environment before and after finishing
- Still not using kiln dried material for all components

- Need additional training on benefits of KD material in their product
- Too many staples being used for attaching component parts –
 - Need to improve fastening capabilities
- Their accountant believes in order to keep lumber costs down they must utilize even components that have quality defects, which results in the manufacture of low quality products
 - Need assistance in cost accounting, yield and recovery analysis
- Discussed the AWPK association and certification program and its importance in assisting them in competing with imports and developing export markets into the EU.
- Agreed a product certification program was needed to increase sales potential in the domestic market by making consumers more aware of quality of locally made products by setting norms or standards using a certification program by which all imports must compare and to which all domestic manufacturers must elevate in order to sell quality products

Wood Processing Sector Company #10

Company: Ahikos
Location: Ferizaj
Contact: Shaip Ahmeti – owner/manager
Telephone: Office +381-290-27-919, Tel & Fax +381-290-28-486
Web & Email: www.ahikos.com, ahikos@hotmail.com
Type of Business: Furniture
Species: Beech
Products: Upholstered furniture (metal and wood), dining tables, entertainment centers, and children's furniture

Quality: No certified production norms for quality – and no certification norms for child safety issues.

Observations:

- Green lumber purchased from local supplier
- Improper stacking of green lumber and storage results in degrade
- Sawn lumber is of poor quality with regard to both grade and processing
- 56 employees (20 seasonal)
- They manufacture the metal frames for a modern style of upholstered furniture and the metal frame portion of the traditional upholstered furniture
- Housekeeping is very poor
- Different elevations in production area floors require carrying product up stairs as it goes through production process – no conveyor system
- Trying to expand into children's bedroom furniture and entertainment centers
 - Difficult market to compete in particularly with the low-cost products coming into Kosovo from China
 - Need very high production requirements to be competitive
- Improper dust removal in component manufacturing area
- Improper paint (finishing) room
- Wood frame construction used in furniture was very good; nails used where they worked best and staples in appropriate situations.

Business Concerns:

- No formal marketing plan in place, but does do some advertising in local papers
- Has 3 floors of showroom space in manufacturing facility
- Increased competition in local markets is making domestic sales less profitable
- Have brochures for all their major products

Quality Concerns:

- Discussed the AWPK association and certification program and its importance in assisting them in competing with imports and developing export markets into the EU.
- Agreed a product certification program was needed to increase sales potential in the domestic market by making consumers more aware of quality of locally made products by setting norms or standards using a certification program by which all imports must compare and to which all domestic manufacturers must elevate in order to sell quality products
- Improper painting (finishing) room installation making it difficult to maintain finishing quality – high levels of particulates

Wood Processing Sector Company #11

Company: Ajos Jpano
Location: Ferizaj
Contact: Fadil Ratkoceri
Telephone: Office +377-44-175-166 or +377-44-127-418
Web & Email: ajospano@hotmail.com
Type of Business: Doors and Windows
Species: Beech
Products: Wood doors and windows

Quality: No certified production norms for quality.

Observations:

- Green lumber from local supplier
- Green lumber is stacked and stored properly to avert degrade
- Sawn lumber appears to be of good quality
- 4 employees
- They have small showroom at the manufacturing site
- Housekeeping is very good
- Have a proper dust & shavings collection system in place and operational
- Very good material handling and storage techniques
- Paint (finishing) room can at least be closed off minimizing the effects of dust and particulates in the finish, but still not ventilated properly
- Window frame construction is of traditional style, but they have samples of a new style requiring less wood, and more rubber and metal for proper sealing and closing
- They are looking at starting to use a water based painting (finishing) material
 - Cleanup is much easier
 - Application is easier and more consistent than stains and lacquers
 - Environmentally friendlier than petroleum based stains and lacquers

Business Concerns:

- No formal marketing plan in place with walk-in traffic their sole source of sales
- Increased competition in local markets making domestic sales less profitable
- Have brochures for all their major products

Quality Concerns:

- Discussed the AWPK association and certification program and its importance in assisting them in competing with imports and developing export markets into the EU.
- Agreed a product certification program was needed to increase sales potential in the domestic market by making consumers more aware of quality of locally made products by setting norms or standards using a certification program by which all imports must compare and to which all domestic manufacturers must elevate in order to sell quality products

Wood Processing Sector Organization #12

Organization: Wood College
Location: Peje
Contact: Heinrich Hoese, Advisor/Instructor
Type of Business: Academic Institution – Technical College

Structure and curricula:

- College setup to instruct individuals in proper use of basic machinery used in the wood profession.
- Combination of classroom and practical instruction; make furniture for sale as part of the practical exam, with all funds generated going to the college. It is an expensive program to run and minimal funding comes from the state and student tuition.
- All students attending are there not by choice, but by process of elimination and generally forced by their families to attend. Most students prefer to attend a university or find other work, but haven't the financial backing or skill sets to do so. They would prefer jobs that are less physical and generally in an office environment. They know that pay rates are lower in this profession and they will have to work long hours in less than satisfactory conditions.
- The current secondary education system is poor due to underpaid teachers with very low motivation or other outside interests. Example: students attending the college have extremely low basic math skills, so part of the curriculum is teaching the students improved mathematics skills.
- There are no books available in the Albanian language to reinforce instruction at the college. Heinrich has developed a very basic book on joinery, but it is only a beginning.
- College instructors have low salaries (150 euros/month) and after he gives them the opportunity to teach and they learn the improved skills, private industry hires them away at much higher salaries.
- An OJT program needs to be started during the summer months while formal education is paused, so the students have an opportunity to earn money, but also to experience the real wood working environment.
- He would like to do field seminars and short training sessions in the field; but, no funds are available for such programs.

Observations:

- The equipment in the shop is very new with funding provided by the German government. They provided 2 million euros to establish similar training facilities for car painting, metal work and plumbing.
- Quality of workmanship was good, but not really up to current western standards (showed lack of proper follow-up on instruction)
- Making very basic products, but the dilemma is producing products into a very competitive shrinking market taking potential sales away from local manufacturers
- Perhaps a program can be setup where they supply these products to local manufacturer to avoid being in direct competition and subsequently classified as unfair competition, since they are not required to pay normal indirect operating expenses
- They have the basic equipment for processing and manufacture, but lack a professional painting booth for finish work
- Burim Meqa from KCBS will work with Hoese and GTZ to setup a program in cooperation with the AWPK to further develop technical training
- The combination of the University, Wood College and selected manufacturers establishing the certification program should be more effective and relevant to the industry.

ANNEX 3

CONSULTANT RESOURCES AND PROJECT REFERENCES

Over a 21-day period beginning May 16, 2005, Wood Processing Industry Specialist, Matt Anderson, conducted a cursory review of progress made by wood-processing sector companies and made physical on-site facility visits to several enterprises, agencies and the Association of Wood Processors in Kosovo (AWPK) that became the basis for this report.

In addition to generating company summaries from those enterprise inspections, any research materials utilized, economic, trade and technical historical data that may have been quoted, included as addenda, excerpted and/or used as a resource to develop recommendations for this report are among the following and those references are hereby acknowledged.

http://www.wwpa.org/about_wwpa.htm

Western Wood Products Association

<http://www.lumberbasics.org/>

WWPA Lumber Basics

<http://www.softwood.org/Species%20&%20Grades%20Web/SGWeb/EN/S&G.htm>

Western Softwood Species Grades

<http://www.awc.org/index.html>

American Wood Council – Technical Journals

<http://www.tecotested.com/approvals.htm>

TECO Technical Test and Certification Data

<http://www.certifiedwood.org/>

Forest and Product Certification Data

<http://www.ul.com/tca/summer04/wood.html>

Underwriters Laboratories – Certification Program Development

http://www.ansi.org/conformity_assessment/accreditation_programs/accreditation_certification_programs.aspx?menuid=4

American National Standards Institute Accreditation Programs Site

<http://agrifor.ac.uk/browse/cabi/273caab6b16414f218685572df7c7324.html>

AGRIFOR – UK Codes and Certification Development

<http://www.ces.ncsu.edu/nreos/wood/previous.html>

North Carolina State University Extension – Certification Courses

<http://www.fsc.org/en/>

Forest Stewardship Council – Forest Certification

<http://www.bcit.ca/study/programs/7550dipl>
British Columbia Institute of Technology –
Wood Products Manufacturing Certification

<http://www.nofma.org/cwficourse.htm>
Certification Coursework – Wood Flooring

<http://www.idcon.com/reliability-tips-51.htm>
Preventive Maintenance Scheduling

Random Lengths
<http://www.randomlengths.com/>

Wood World – Industry Trade promotion
<http://www.woodfibre.com/wood/index.html>

Nat'l Wood Pallet and Container Association
<http://www.nwpca.com/>

Architectural Woodworking Assn – check out the “quality certification” section (left side)
<http://www.awinet.org/>

Cabinet Makers Assn
<http://www.cabinetmakers.org/>

WINSTEP – International product data exchange
<http://www.winstep.org/>

Western Pallet Manufacturers Association
<http://www.westernpallet.org/>

Woodworking Machinery Industry Association
<http://www.wmia.org/aboutwmia.cfm>

ANNEX 4

LIST OF ADDITIONAL INFORMATION PROVIDED ON CD

STANDARDS – SPECIFICATIONS – CERTIFICATIONS AND INDUSTRY GUIDELINES

- The Wood Handbook – Wood as an Engineering Material -A comprehensive digest of wood properties, specifications, uses, and applicable standards
 - USFS/FPL Publication FPL-GTR-113
- Manual of US Millwork Standards
 - Certified and Monitored Compliance
 - Specifications and Certification Procedures
 - Quality Compliance and Assurance
 - Lumber (exterior/interior uses)
 - Factory Finishing
 - Trims, Jambs, Millwork
 - Plywood
 - Wood Window and Door Sash
 - Stairs
 - Architectural Wall Surfacing
 - Countertops
 - Casework
- Dry Kiln Operator’s Manual – A Comprehensive Guide to the Science of Drying Lumber – USFS/FPL Agricultural Handbook #188
- Lumber Drying
 - Dry Kiln Schedules
 - Drying and Conditioning Specifications
 - Quality Standards for Drying Hardwoods
 - Air Drying Schedules
 - Waste Reduction
 - Lumber Storage
- Lumber Specifications
 - Hardwood Dimensions
 - Softwood Dimensions
 - Grading Rules
 - ISO 9000 Issues for Structural Composite Lumber
- CEN/TC 207 "Furniture"
 - 30 Adopted EU Standards
 - List of CEN Standards (available for purchase)
 - How a CEN “Standard” is Created
- Certification Standards
 - KCMA – Kitchen Cabinet Manufacturers Association (US)
 - Fingerjoint Principles – The Weinig Machinery Group
 - Scaffolding Plank Standards

- EU/US Compliance Standards (available for purchase)
 - Adhesives
 - Foam
 - Upholstery
 - Architectural Flush Doors

- Final Draft of Recommended Revisions to the AWPK Strategic Plan

- Facility Process and Design

- Marketing Objectives for Kosovo Wood Processors

- Preventive Maintenance Principles Presentation
 - Glossary of PM Terminology