

CHAINSAW LUMBER PRODUCTION: A NECESSARY EVIL?

Proceedings

**Tropenbos International - Ghana
Focus Group Discussion**

Wood Industries Training Centre

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OPENING SESSION

The workshop was organised under the theme “Chainsaw lumber production, a necessary evil?” Dr. Djokoto, a Board Member of the Forestry Commission chaired the workshop, which started at 9:50am.

The aim of the workshop was to bring together key stakeholders to deliberate on the issue and come out with strategies to move forward

CHAIRMAN'S REMARKS

The Chairman, Dr. Djokoto in his introductory remarks thanked the organisers of the workshop for the opportunity given him to chair the meeting. There is the need therefore to ameliorate the dangers and harm these activities pose to the general public. He therefore urged all participants to discuss issues openly, thoroughly and with the frankness they deserve so that at the end of the meeting the house would find amicable solution to the issue.

WELCOME ADDRESS AND OVERVIEW

The issue of chainsaw lumber operation has assumed an international dimension.

The Programme Team Leader of Tropenbos International-Ghana, Mr. K. S. Nketiah welcomed all the participants to the workshop and touched on the key issues to be discussed, which included the following:

- Sustainability of the resource base
- The ban on chainsaw lumbering
- Difficulties in enforcing the ban
- Demand and supply to the local market
- Jobs created by chainsaw lumbering

After this, he briefly highlighted on the activities of Tropenbos International Ghana. He explained that the Tropenbos Ghana Programme (TGP) is an affiliate of Tropenbos International with the mission to provide distinctive scientific input into the sustainable management of Ghana's high forest resources, through local and international cooperation. The mission is to be achieved through the use of strategies such as:

- Research and training
- Design and test of methods
- Promoting update and application
- Collaboration and cooperation

KEYNOTE ADDRESS

Minister of Lands and Forestry, Professor Dominic Fobih in his keynote address enlightened participants on the legal history of chainsaw lumber production in Ghana and its subsequent ban following the widespread abuses of the system by District Assemblies. He noted that the fact still remains that in spite of the ban, the chainsaw lumber production persist and is on the ascendancy.

This act, he said has been detrimental to both the environment and national economy. The non-payment of stumping and other statutory fees by chainsaw operators has led to depressed

domestic prices making it a disincentive for the legitimate timber processor to deliver lumber to the local market. Negative environmental consequences such as harvesting timber from areas reserved for biodiversity, protection of watershed and checking soil erosion also occur via chainsaw activities.

He declared, that his ministry has observed the current form of chainsaw operations and testifies that it cannot not be controlled and sustained within the limits of the Timber Resources Management Act, 1997 (Act 547) and Timber Resources Management Regulation, 1998 (LI. 1649).

To accommodate illegal chainsaw operators, he outlined the following as steps to be taken by his ministry:

- Creation of alternative livelihood schemes for the absorption of the large number of illegal chainsaw operators
- Timber companies will be encouraged to employ some of the chainsaw operators to assist them in the harvesting and cross cutting in areas where conventional logging equipment cannot be used.
- Preferences will be given to known chainsaw operators who have the means to invest in the establishment of mobile mills in strategic localities in the country
- Massive awareness creation via both electronic and print media

He further said that his ministry has taken measures to ensure the adequate supply of mill-sawn lumber and other wood products to meet the demand of the local market. He added that the Ministry of Works and Housing, Regional Coordinating Councils, District Assemblies and all contractors working on government projects would be requested to source their lumber from the mills or any other legitimate source.

He claimed the ministry is aware of some disgruntled officers of the Forestry Commission, hence there are investigations and monitoring processes going on to flush such officers out of the system.

In conclusion, he said measures to stem the spate of illegal chainsaw activities would also involve the implementation of a credible log-tracking programme in order to effectively monitor the felling and transportation of timber from the forest to processing centres.

Out of the 2.7 million cubic meters of timber which is harvested annually from the forests, illegal chainsaw operations alone account for 1.5 million cubic meters.

After the opening session that included the chairman's and keynote addresses, the workshop was divided into two technical sessions, group discussion and plenary session. In all eleven (11) papers were presented.

CHAINSAW LUMBER PRODUCTION AND SUSTAINABLE FOREST MANAGEMENT

This paper was presented by Mr J. E. Otto, the Acting Chief Executive of the Forestry Commission. He touched on the following key issues:

- Chainsaw lumber production had become major activity and generates employment for about 50,000 people in most deprived rural areas in the high forest regions of the country.
- Currently timber utilization contracts or concession allocations are done on the basis of competitive bidding. Prior to this, illegal timber felling activities was on the increase.

- Attempts to control chainsaw operations have proved futile as the ban on chainsaw operations has not been effectively enforced.
- Sustainability of forest resources have therefore become a problem for the forestry sector institutions.
- There was the Trees and Timber (chainsaw operations) Regulations, 1991 (L.I. 1518) where the activities of chainsaw operators were legally recognized. But abuses in the system led to enactment of Act 547 and LI 1649 which outlawed chainsaw operations in the country. However it is still on the ascendancy.
- Current measures to address chainsaw operations:
 - Accommodation of chainsaw operations under Alternative Livelihood Programmes.
 - Advertisement in both the electronic and print media giving chainsaw operators a grace period of 3 months to dispose off existing stocks of timber.
 - Drawing up of comprehensive plan by Forestry Commission to link all wood dealers with various sawmills.
 - Upfront payment to farmers by chainsaw operators.
 - Collaboration between the Forestry Commission Judiciary, law enforcement agencies and other stakeholders to deal with illegal operators.
 - Forestry Commission to ensure that government directs contractors working on government projects to source their lumber from the mills.
 - Forestry Commission is also taking steps to enforce Timber Resources Management Act 1997 (Act 547) section 17.
 - Implementation of the log trucking system

In conclusion, he said, he was optimistic that with the successful implementation of the above measures, the problem of illegal chainsaw operations and other illegal forest activities will be minimized and eventually eliminated.

Chainsaw lumber production generates employment for about 50 000 people in most high forest rural areas.

MEASURES TO CURB CHAINSAW LUMBER PRODUCTION

In presenting this paper Mrs Edith Abroquah, Regional Manager of Forest Services Division, Koforidua highlighted on the following:

- **Law on chainsaw lumber operations:** it was indicated that the Forestry Commission is taking concrete steps to enforce the Timber Resources Management Act, 1997 (Act 547), Section 17. (2) and the Timber Resources Management Regulations, 1998 (L.I. 1649), Regulation 41(3) which states among others that 'Public officers who commit offence with regard) to illegal timber operations are liable on summary conviction to a fine not exceeding ₵ 5million or imprisonment for term not exceeding 12 months and shall be liable to dismissal from public service.
- **Operations/challenges of the Forest Services Division (FSD) monitoring Team:** it was noted that the FSD monitoring teams have been working around the clock to curb down illegal chainsaw activities. However in the course of the discharge of their activities, members are normally beaten up and some even become incapacitated in the process, since some illegal chainsaw operators possess sophisticated weapons and some FSD staff members team up with chainsaw operators to cut the logs.

In conclusion she recommended the following:

- Public education on effects of chainsaw lumbering
- Encouraging the acquisition of forest mills by individuals and organised groups

- Government should buy chainsaw in the system and support their respective owners go into reforestation.
- The penalty imposed on perpetrators should reflect the market of the timber resource.
- Commercial markets should be attacked to rid the market of all chainsaw lumber.
- Reviewing of the penalty in connection with chainsaw lumbering

Attempts to control chainsaw operations have proved futile as the ban has not effectively enforced as a result of the indulgence of some Forest Services Division staff and security officials in the act.

COPING WITH ILLEGALITY: CONFLICTS OVER CHAINSAW LUMBERING AND COPING STRATEGIES

Mr. Emmanuel Marfo, a Research Scientist with the Forestry Research Institute of Ghana (FORIG) presented this paper. In his presentation, he argued the following:

- The chainsaw issue is a conflict because all the actors involved perceive the action of others as impairment to their interest in the use and management of forest resources.
- The chainsaw conflict has progressed for so long because there is power play between the state law and the citizenry's defiance and 'deviance'.
- The state coped with the situation by using three strategies which included centralizing control of off reserves, criminalizing the informal timber sector by legislation (L.I. 1518 of 1991) and using punitive campaigns through the military against offenders.
- A triangular relationship of and the lines of influences among local stool, DFO and the community hinder forest policy through the chainsaw activities.
- The chainsaw operators have evolved ways and means of dealing with the agency of the state, the local opposition, the police and the forestry officials.
- The government is pursuing a policy to compel sawmills to sell to the domestic market mainly by relying on legislation as the instrument to enforce the policy.

Under enabling and constraining circumstances:

- Fundamentally the existing and growing demand for wood and wooden products has provided and sustained the economic incentive for hunting timber.
- The social alliances formed with resource 'owners' through the direct arrangement of mutual financial and social benefits have enabled the illegal operations.
- The inability of the state to effectively enrol the agency of the local actors on the ground through direct financial and economic incentives.

In conclusion, he said when asked to play the devil's advocate for illegal chainsaw operation, he will do so by asking the following questions:

- If indeed forestland and resources belong to the state, shouldn't any individual have the right to exploit them to support livelihood?
- If export of timber is stifling domestic supply, shouldn't chainsaw operations be used to help meet the demand of timber from the forests?

If the farmer who has nurtured the tree on his farm cannot enjoy any direct financial benefits from formal arrangements but can do so with the chainsaw operator, then what do we expect?

THE LOCAL WOOD MARKET: SIZE AND NATURE

Mr. Henry .G. Coleman, Trade and Industry Manager of Timber Industries Development Division (TIDD), presented this paper. The issues he highlighted include the following:

The wood based industry contributes greatly to the nation's foreign exchange earnings and employment levels. This contribution is however dependent on availability of adequate and sustained raw material base.

Domestic Market Situation: a survey report on local market identified a total of over 41,000 small-scale carpenters and 25 mediums to large-scale furniture and joinery companies in the country. General joinery chop boxes, pallets, etc. account for about 75% of annual total sawn timber requirement of the country. Small-scale carpenters require over 219,000m³ of lumber annually while the medium and large-scale furniture companies require about 120,000m³ a year most from sawmills. Most construction and housing companies obtain less than 10% of their wood supplies from sawmills. Sawn timber requirement for various end users annually is about 456,417m³.

Lumber production and consumption: the annual local lumber consumption has increased from less than 100 000m³ in 1993 to an average of 300 000m³ in 1985. There is a gap between domestic lumber requirement and the apparent consumption. The gap is therefore filled illegally from chainsaw lumber and illegally sourced logs.

Supply of lumber to the local market: recorded figures from TIDD report indicate that sawmills in the country supply 102,362.757m³ of lumber to the local market. Supplies for the period January – August 2003 was 53,771.164m³. In 2002 the selected mills accounted for an estimated 20,097.867m³. This was because most of the non-selected mills are of high production capacities and belong to the large/medium scale category.

Reasons for the decline in volume of lumber supply to the market:

- (a) Delays in the allocation of TUC's
- (b) Non availability of logs in the preferred species at the sawmills
- (c) Continued availability of cheap chainsaw lumber in the major markets that renders sawmill lumber expensive to most consumers.

Sawmill lumber supply and channel of distribution by regions: selected sawmill category – companies in Ashanti Region led with total supply volume of 8,237.351m³ (2002). Non-selected mills in Western Region contributed the highest with total supply volume of 35,009.029m³ (2002). To formalize and improve the sale of sawmill timber locally TIDD is facilitating the establishment of sales depots at the various mills.

Species supplied and sizes: Species of timber for local use are almost the same as those on demand on the export market. Out of about 50 species, the twelve (12) most common species include Wawa, Offram, Dahoma, Odum, Kyenkyen, Ceiba, Emire, Essia, Mahogany, Nyankom and Danta.

He concluded by stating that sourcing lumber on the domestic market has seriously become a great challenge for policy makers, timber sellers and buyers and end-users, because of the resulting illegal trade in chainsaw lumber. Most sawmills in Ghana are export oriented and therefore pay little attention to the local market as far as lumber supplies to the local market is concerned.

The annual lumber requirement for various end users is about 456 417m³ and the supply to local market from the sawmills is 102 363m³. This gap between demand and supply is filled by lumber from illegal chainsaw operations.

HALTING CHAINSAW LUMBER PRODUCTION: COUNTING THE COST

Mr. Attah Owusu, started by throwing light on the situation of the nation's resources. He said Ghana's high forest has reduced from 8 million hectares to 1.63 million hectares owing to factors such as clearance for agriculture, inappropriate management frameworks, wildfires, charcoal production; surface mining, uncontrolled logging and the most destructive illegal chain sawing.

Enactment of trees and timber (chainsaw operations) regulations, 1991 – L.I. 1518:

The use of chainsaw in the processing of wood started in the 1980s and led to the promulgation of the Trees and Timber (chainsaw operations) Regulation 1991 (L.I. 1518) which mandated District Assemblies to register chainsaw machines and give permit for the felling of trees in conjunction with the District Forestry Officers.

Revocation of L. I. 1518: It was noted that LI 1518 was revoked for the following reasons:

- Prime species were being creamed
- Permits were photocopied and used several times
- Barons in the cities, who were the main sponsors of the chainsaw operations, directed the products to the cities as destination points thereby depriving the rural folks of lumber supply.
- There was a lot of wastage as recovery was very low (Usually less than 20%)
- Undersized trees were being felled.
- The operators dodged payment of royalty, rent and other taxes.

He stated that Section 31 (1) of the Timber Resources Management Regulations 1998, LI 1649 only prohibit the use of chainsaw to convert timber into lumber for sale without considering lumber sawn with chainsaw for non-commercial purposes.

Government policy to address the supply of lumber to the local market: it was confirmed that the Minister of Lands and Forestry had directed that all milling companies should supply 20% of their lumber production to the domestic market as stated in Section 36 of L.I. 1649 and granted special permits to some companies to supply to the local market. This he lamented is not the situation on the ground because of the following:

- High cost of timber products from sawmills compared with the price of chain sawn products.
- Saw millers prefer to export their products to enable them get back their investment.

What is prevailing now?

It was noted that Forestry Commission resulted to the use of Regional Timber Task Forces comprising the Military, Police and staff of the FC to help stem the situation as the number of retail outlets of chain sawn lumber is increasing.

Counting the cost: it was mentioned that costs such as threat to human lives, loss of man-hours, social, economic, personnel and environmental had been incurred in fighting illegal chainsaw lumbering.

The following recommendations were made as steps to ease the situation;

- Companies which were issued with special permits to supply the local market but failed should be sanctioned.
- The directive by the Ministry of Lands and Forestry to the millers to supply 20% of their lumber output to the local market should be looked at critically to facilitate the development of workable strategies
- Design of wood friendly houses to reduce the use of wood in building.

- The public should be encouraged the use plastic and bamboo as substitutes to wood panelling and doors.
- Policy makers should ensure that the laws are enforced, since the ban on chain saw operations is not working.
- There should be intensified education on the ill effects of chainsaw operations by the media and the FC especially around the forest fringe communities.
- Chiefs and rural communities should be given sustainable incentives and livelihoods so as to refrain from colluding with the perpetrators.

He concluded by saying that, the issue of banning chainsaw operations completely is quite complex since the saw millers are unable to meet the rural society's wood requirements. Even though abuses were prevalent, there was a lot of wastage when chain sawing was legalized in the early 90s; it is felt that the issue of chain sawing is no longer a forestry issue but a social one which needs to be discussed in that context.

Ghana's high forest has reduced from 8 million hectares to 1.63 million hectares in a century owing to many factors of which uncontrolled logging and illegal chain sawing are the most prominent ones.

POLICY MEASURES TO CONTROL ILLEGAL CHAINSAW OPERATIONS

Dr. Victor Agyemang, in his paper reviewed past chainsaw policy measures and spanned through the rationale for the ban, its impact and measures to control illegal chainsaw operations. He asserted that "interim measures" in 1994 was the first serious attempt to address the problem. In 1996, the first police and military task force was deployed. The Timber Resources Management Act (Act 547) prohibited chainsaw operations in 1997 with its accompanying legislative instrument, Timber Resources Management Regulations 1998 LI1649.32 (1), (2). In 2001, the Ministry of Lands and Forestry set up a policy advisory committee followed by a policy reform process in the subsequent year. Finally cabinet and parliament gave approval for policy reforms in 2003.

He stated that Ghana accords "environmental considerations" priority over revenue accruals. Hence the rationale for introducing the ban among others was to:

- To allow the FC to improve over logs and lumber.
- To guarantee supply of raw materials to the local sawmills or timber industry
- Protection of wood processing industry (which enables many firms to earn windfall profits).
- Job creation

He said the ministry of lands and Forestry would accommodate chainsaw operators under the law to engage them in alternative livelihood support schemes. In conclusion, he said there is the need to put in place pragmatic approach to the issue of chainsaw lumber production.

Market-based approach may be a better option control of processing and supply. Competitive bidding may be useful.

LUMBER SUPPLY TO THE LOCAL MARKET: FROM POLICY TO PRACTICE

Mr. E.E.K Acquah – Moses, Executive Secretary of Ghana Timber Millers Organisation (G.T.M.O) presented a paper on “Lumber supply to the local market: From Policy to Practice”. The highlights of his paper included the following:

- The timber industry has employed about 100,000 workers and has accounted for the 6% of the GDP and 11% of the country’s total exports.
- Wood processing companies like any other Ghanaian business are subjected to value-added tax, corporate tax, local government tax, social security contributions, variable stumpage payments, land rent, social responsibility agreements, species-specific air-dried lumber export levies, and across the board export levy (3% of export value) and the reconstruction levy (7% of export revenue) as well as import duties on machinery and spare parts.
- Only about 2 million cubic metres lumber could be pointed to legal timber felling as against 15 million cubic metres which is attributed to bush-fires, farming practices and illegal chainsaw operations.
- Timber Millers are using Lesser Used Species (LUS) as a contribution to the nation’s sustainable forest management and utilisation efforts. This will relieve the pressure on the few primary timber species that are threatened with extinction.
- Timber Millers have been acquiring Kiln Driers and other equipment as a contribution towards downstream processing.
- High levies and taxes have been placed on total proceeds from products of saw millers as result of the erroneous perception that a lot of profits are being made from the Industry.
- The prices that are quoted by saw millers at the sawmills should be accepted as the real prices of lumber in Ghana and they are a true reflection of the cost build-up which has been influenced by high operational costs and various fiscal components placed on products.
- The Timber Industry is the only sector in the Ghanaian economy that has suffered from a phenomenon called “REGULATORY INFLATION”
- There has been little assessment of the underlying reasons for the failure of forestry regulations.
- The directive for local sales of lumber has been complied with; however some individual firms are supplying low volumes. Lumber supplied to the local market by selected and non-selected mills in April 2003 amounted to 6,379.477m³ yet there was no returns signifying the lack of demand on the local market.
- The local market prefer species such as Odum, Mansonia, Avodire, Black Hyedua, Akasa and Walnut but the sawmills mainly produce Wawa, Offram, Dahoma, Wawabima, Kyenkyen, Essia and the Lesser Used Species which they been encouraged to utilise over the years.
- The Forestry Commission was quick in implementing LI 1649 regulation 36 through coercion and methods that defy economic principles. It has not used the same force to halt the activities of chainsaw operations that go contrary to regulation 32 of the same LI 1649 and using isolated cases of resistance to justify their shortcoming while it has the whole security agencies under its request.
- The suspension of TUC’s and failure to grant concessions (except for government companies whose concessions have been sold) for about 10 years has given chainsaw operators a field day to virtually loot trees from the concessions. In addition felling of plantation timber has been suspended for sometime now.
- The 30-60 trees in concessions that were given some of the selected mills are not enough to feed the public.
- The public usually requests for difficult particular species dimensions and specifications which are so divergent that it disturbs the production lines of sawmills.

He further recommended the following:

- Public should be encouraged to negotiate with millers for realistic pricing and consequently constant supply in view of the divergent forces at play within the industry.
- Government must show the way in the use of LUS by insisting on their use for its projects. Bodies like GREDA should be similarly encouraged to make use of LUS and negotiate with the millers or G.T.M.O over local supplies.
- Research Institutions should be well resourced to enable them educate the public on the uses of LUS.
- Identification by the provision of the actual demand of lumber products indicating species, dimension and specifications to assist sawmills to set up production lines for such production. Public could then be directed to particular sawmills for their orders.
- The industry should be involved in the formulation of policies within the industry with particular reference to local supplies.
- Chainsaw operators should be mobilized and given forest mills to operate and supply the rural communities with lumber.
- There should be a reduction of lumber exports with an added advantage of downstream processing.
- Creation of a buffer to purchase sawn lumber for onward sale to the public.
- Avoiding the misuse of wood.
- Plantation timber should be channelled to the tertiary sector of industry.

The timber industry has employed about 100,000 workers and has accounted for the 6% of the GDP and 11% of the country's total exports.

CHAINSAW LUMBER PRODUCTION IS WASTEFUL: FACT OR MYTH?

Dr. K. Frimpong –Mensah of KNUST presented a paper on "Chainsaw lumber production is wasteful: fact or myth? His presentation focused on the following:

- On the conversion efficiency of chain sawing machines, factors such as saw kerfs width, operator's skill, sawing patterns, and market demands come into play. The lumber conversion efficiency is ranged from 22% of 60% with a mean of 40%. Yield of lumber can be improved considerably if such factors can be controlled.
- In a study, logs from 72 trees sampled from a Forest Reserve in the Goaso Forest District and from Off Reserves in the Asante Akim North District, were processed with chainsaw. Logs were measured after bucking. A slab is removed first from one side of the bole, and then sawing is done through the middle.

For further sawing to proceed, a monkey jack is used to lift the logs on benches created from the slabs or logs from smaller trees.

The jacking exercise can take as long as 3 – 4 hours depending on the size of the tree and the terrain. A wooden bar is used to roll the logs to the benches if they are of small diameter. Wooden chucks are put in place to prevent the logs from rolling back. Chucks are made into short wooden wedges. On the opening face of the logs, lines are drawn lines; indicate the thickness of the fitches to be sawn. They are made using a mixture of water and powdered carbon from dry batteries. A twine is dipped in the mixture and used to mark the parallel lines corresponding to the specific lumber widths. As the operator saws along the lines, the assistants sweep off the saw dust from the cut surfaces. The lumber conversion efficiency depends on the skill of the operators, the log quality, the hardness of the log etc. Butt-end and top-end residues are usually left, unprocessed.

- The average log conversion rate at the stump site using the chain saw was 40% with the maximum of 5%. In a similar study at some sawmills in Kumasi, the average lumber recovery was 39%.
- Much useful wood is left in the forest, due to the buyers demand for specific lumber dimensions.
- In terms of the costs involved in production of lumber using the chainsaw, it is more profitable than the conventional sawmilling process. Chainsawing process is less capital intensive. The causes of waste generation in chainsawing can be attributed to the inherent wood defect, such as heart rot, cracks, shakes, mineral deposits (silica) etc.

In conclusion he said chainsaw operators cause minimal damage to the forest and furthered that tree top-end wastes and stump timber should be sawn into short length of lumber for the furniture market. Also trees on farm should be chain sawn to reduce logging and harvesting damage to crops.

The average lumber conversion efficiency of the chainsaw is 40%. This means that chainsaw lumbering may not be wasteful after all.

STAKEHOLDER PRESENTATIONS

EFFECTS OF CHAINSAW LUMBER OPERATION IN GHANA

This paper was presented by Mr. M. O. Addai secretary of the Wood Working Machine Owners Association. The highlights of his paper were:

Historical background of the chainsaw operation: in the early 1980's the Ghana Timber Association (G. T. A) supplied wood in the form of lumber and off cuts to the general public. During that period, prices of lumber were low till the late 80's when prices shot up when middlemen were introduced into the business. The saw millers were then asked to supply 20% of their wood to the local market, yet most sawmills did not give out the supply and the few who did, only supplied grade 3 and firewood. This resulted in many wood sellers shifting to the chainsaw operators for their supply which they saw nothing wrong with it due to abundance of wood in the forest and also the fact that the chainsaw operators were allowed to fell only specified, selected trees and off cuts from the G.T.A.'s concession

The function of the Association: it was indicated that the Association uses chainsaw lumber especially the beams, by sawing, planing, lathing, moulding and cutting them into shapes for furniture and other woodworking objects for estate developers and timber sellers, etc. to manufacture their components.

Effects of chainsaw lumber production: when the chainsaw lumber production started, local timber markets were flooded with beams both good and bad qualities. The chainsaw operators illegally entered into the G.T.A.'s concession, fell trees indiscriminately which led to loss of revenue to the Ghana Timber Association, the Ghana government and the local chiefs since no compensation was paid to them.

Effects of the ban on the chainsaw lumber production: the ban has led to partial collapse of the Wood Working Machine Owners Association, which has resulted to the inability of members to service loans contracted from banks. He continued by saying this encouraged smuggling of logs to neighbouring countries resulting in a greater loss of revenue to the nation and an increased unemployment situation with its attendant social problems like theft.

The way forward:

- Chainsaw operators must be registered
- Operators must work under the district forest officers, unit committees and chiefs
- Permits must be obtained before operation
- Night operations must cease
- Operators must aid in afforestation
- Operators should stop operating near riverbanks and in forest reserves
- Selected trees must be allocated to them
- Seized lumber from operators must be sold to any recognised association in the timber industry
- Government should cause saw millers to supply wood sellers with grades 1 and 2 lumber and limit the exportation of lumber.

The ban has rendered most chainsaw operators jobless which has led to the inability of members to service loans contracted from banks chainsaw.

CHAINSAW OPERATIONS

In presenting his paper Mr. Prince Brenya Bonsu, the president of Woodworkers Association of Ghana (WAG), focused on the following issues:

He commented that in 1960, chainsaw machines were introduced to Ghana to replace the long manual blades previously used in logging (FOE/FOELINE Ghana, 1998). The chainsaw were used mainly for felling and crosscutting of trees. The unconventional method of producing beams and lumber on commercial base became widespread as sawmill operations declined in the early 1980s. Consequently the then government was compelled to recognize it and tried to regulate its activities.

Controls: it was indicated that the expression of concern by society led to the Chainsaw Operations Regulations, 1991 (LI. 1518) that was introduced by the PNDC government. This legislation gave the District Assemblies and the Forest Service Division the authority to regulate the use of chainsaw.

The regulation required that chainsaw operators registered their machines with the District Assemblies and acquired felling permits from District Forestry Officers before they could fell or saw logs. The flagrant abuse of this privilege by the various stakeholders (forestry officers, district assemblies, security officers, traditional authorities and the chainsaw operators themselves) led to the inception of the LI. 1649 (1998) regulation 32 subsection 1 and 2 which seek to ban the use of chainsaw in lumber/beam production and the sale of such products.

Effects of the Ban: he reiterated that it is true that chainsaw lumber have enjoyed the patronage of their members and those issues concerning chainsaw operations remains dicey as far as their industry is concerned.

He said timber accounts for not less than 90% of all employment in the forestry sector in Ghana and that WAG has a membership of about 20,000 nationwide. A collapse of the industry means loss of livelihood for all these people and their dependents.

In an attempt to enforce regulation 32 subsections 1 and 2 of LI. 1649 (1998) without guaranteeing adequate lumber supply from the saw millers at affordable prices, untold hardships have come to be borne on our members.

The way forward:

To find lasting solution to this nagging problem, he recommended the following:

- The authorities should consider the re-introduction of registered chainsaw operation system, with appropriate monitoring mechanism.
- The Timber Utilization Permit (TUP) for small-scale millers should be re-introduced and be made to supply the local market only.
- The allocation of plantation species like (Teak and Cidrella) is taking too much time to materialize.
- He concluded that in their efforts to complement that of the government in reforestation, their association has taken up the challenge and has engaged a forestry consultant towards plantation establishment. He also noted that chainsaw lumbering may have a lot of disadvantages yet it provides 70% –80% of the lumber on the local market as well as livelihood for a number of people. To find a solution to the issue, there is the need for a pragmatic approach which will consider the complex nature of chainsaw lumber production.

A collapse of the timber industry means loss of livelihood of most people and their dependents.

SUPPLY OF LUMBER

Mr. Foster Ofori of the Ghana Wood Sellers Association took his turn in the presentation and touched on the following:

He commented that majority of Ghanaians and government agencies rely on Ghana Sawn Timber Sellers for their supply of lumber for different types of building and construction projects. The association is therefore supposed to receive sawn timbers from the various saw millers as arranged by the government, unfortunately the saw millers have failed to supply the association with the 20% lumber as directed by the government. He said this has forced members to rely on chainsaw operators in order to survive.

Problems posed by the chainsaw operation: he reiterated that chainsaw operation is not the best way for harnessing the State's timber resources. For greed, most chainsaw operators fell all types of undesirable trees – both immature and low quality timber for the local market. These affect the environment and the market in a negative way.

Again, dealing with chainsaw operators have not served the best interest of most wood sellers. Most chainsaw operators collect wood sellers monies with the promise of supplying them with lumber but never turn up. This has resulted in some members of the association losing their capitals.

Some members have lost their lives in the course of timber felling, loading of beams, transportation and harassment from government enforcement agencies.

Solutions to the problems associated with chainsaw operations:

1. He commented that as the country is fast developing, the demand for local supply of lumber is also increasing. Measures should therefore be put in place to ensure that, saw millers supply Timber Sellers with lumber. It was indicated that the 20% lumber to be supplied by the millers to the local market would not be sufficient. The association therefore suggests an increase from 20% to 50%.
2. He stated that if the government has realized that the forest resources are depleting, the association suggests that one of the measures to curtail the situation is to control lumber exportation, since local demand is also increasing, if possible export of lumber should be banned. Instead of exporting lumber, they could be processed into "knock downs", which besides having higher value would create employment opportunities to Ghanaians.
3. An appeal by the association to government to reduce the royalties on secondary species like Esia, Otwense, etc. to enable saw millers produce lumber to the local market at the lowest cost.

He concluded by stating that Ghana Wood Sawn Timber Sellers Association plays a vital role to effect a ban on chainsaw operation since members are their direct customers. But much depends on how far the association's concerns are addressed by the government to give serious consideration to the views of the Association.

The failure of the mills to supply the timber sellers led to their reliance on chainsaw operators in terms of lumber supply.

OTHER PRESENTATIONS

Employment: in addition to the above, a member of the Woodworkers Association of Ghana (WAG) suggested the urgent need for regulatory policy on the chainsaw lumber productions to avert any set back. In a related issue a member suggested the need for the government to decrease export of wood and rather encourage downstream processing. He added that the carpentry sector alone employs more than twenty thousand (20 000) people. He cited CIPO a Swedish Group and some Americans companies that are eager to invest in the processing of wood into furniture provided there would be enough raw materials to feed their companies. This he stressed could create employment opportunities.

Prevention via confiscation: another member also remarked that, there is an enormous pressure on the industry. The regulating authorities (Forest Services Division's task force) are compounding the difficulty situation by descending on members. Machines, motorbikes and lumber are being seized coupled with indiscriminate arrests. He therefore challenged the authorities to account for all confiscated chainsaw lumber and beams and to desist from harassing members. In the light of the above he suggested the following:

- The registration of chainsaw operators
- Introduction of a permit system by the Forest Services Division
- Felling of trees along river banks should cease

Problems other than chainsaw operations: a representative of the chainsaw operators also hinted the house on the need to pay attention to methods to curb bushfires rather than laying too much emphasis on chain sawing since their activities do not destroy the forest as portrayed by the public.

He reiterated that the government should help the chainsaw operators to form groups so that they could be educated on reforestation.

Need for plantations: in addition to the above another member suggested the need for a Presidential Initiative in tree planting like what pertains at Ghana Rubber Estate Limited (GREL) and Oil Palm Plantation.

In response it was indicated that the government has instituted a forty-two billion cedi (¢ 42 B) HIPC National Plantation Project which is targeting all regions in the country and all regions stand to benefit from that.

If the authorities cannot discourage or prevent the production of chainsaw lumber, what is the rationale in confiscating the lumber at the end-users workshop?

MINISTERS REMARKS

He accepted the outcome of the discussion and said stakeholders should collaborate with the government to come up with a workable solution to the problems associated with chainsaw lumbering. He stressed on the following:

- Public should cooperate with the police for effective monitoring of the activities of chainsaw operators.
- The need for reforestation since most species are getting endangered
- Chainsaw operators could be licensed to enable them contribute their quota to national development

- On increasing the quota of lumber supplied by sawmills to the local market from 20% to 50% as suggested by some participants, he said his ministry is working around the clock to improve upon the situation. But they should manage with the 20% in the interim.
- On the export of lumber he said apart from teak the saw millers are not allowed to export any other wood species.

He concluded that if all the efforts by the government would be successful then all stakeholders should be law abiding with respect to tax payment. The need to focus on sustainable forest management was stressed. Since the house unanimously agreed on the legalisation of chainsaw operations, he stressed on the need to embark on the following:

- Reforestation
- All stakeholders should embrace Plantation Programme to be initiated by the government

He indicated that all stakeholders should critically examine issue with respect to our forest so that it will be beneficial to the future generation.

GROUP DISCUSSIONS

Participants were divided into four (4) groups to deliberate on issues like Equity, Sustainability, Enforcement and Legalisation with respect to chainsaw lumber production using the following preambles and questions as a guide.

Preamble to questions

Chainsaw lumber production provides jobs (and therefore livelihoods) for several categories of people, including the operators, porters, machine operators and sellers.

There is a policy for sawmills to supply 10% of their production to the local market. But a casual visit to the timber markets reveals that close to 99% of local lumber supply is from chain sawing. It is further argued that supplies from the mills are rather too expensive.

Another positive point people have for chainsaw lumber production is that it gives direct benefits to the farmer who nurtures the tree. But then the practice deprives the government and land owners. (And sometimes even the farmer himself) of any benefits.

Nevertheless, the practice is considered illegal (banned), because it is perceived as wasteful and also compromise on the sustainability of the forest resources due to removal of trees outside the officially determined allowable cut, felling of immature trees and the wastage associated with processing of logs.

Legalisation

1. Considering the above arguments should chainsaw lumber production be legalised or not?

- There should be a thorough research into the pros and cons of legalising chainsaw lumbering
- Members agreed that there should be a second look at the status quo of chainsaw lumber production since its still going on in spite of the ban.
- Chainsaw lumbering should be legalized with conditions:
 - Sawing should be improved without the use of conventional chainsaw
 - Chainsaw operators should operate in inaccessible areas: e.g. hilly areas
 - There should be transparency and equity.

2. What is the way forward?

Members suggested that negative effects of chainsaw lumber production such as wastage, felling of trees below felling limits and tax invasion should be minimized via:

- An identifiable body would have to be formed by these operators.
- All chainsaw operators should be registered
- Chainsaw operators should be trained and certified on how wasting of wood can be minimized in the chainsaw lumbering operations.
- The general public should be educated and sensitised on both the advantages and disadvantages of chainsaw lumbering
- Equitable distribution of fees captured from the activities of chainsaw activities to all stakeholders not excluding the farmers who nurtured the trees on their farms.
- There would also be the need for policy reforms within the sector concerning chainsaw lumbering. The Law on chainsaw lumbering should be altered.
- Policy should indicate clear guidelines on the operations and responsibilities of chainsaw operators
- There should be the introduction of a permit system in which all the associated regulations will be strictly enforced
- As to the monitoring of the association's activities, the group suggested that the Forestry Commission, landowners, Communities and the chainsaw operators themselves be made to play a monitoring role in making sure that the association plays by the rules.
- The proposed timber toll (whatever is decided) should be competitive.
- Revenue generation would be from payment of stumpage fees, taxes and other designed levies.
- Concerning equity, the chainsaw operators claim to make so much unforeseen expenses that if their operation is legalized, they would have a fair deal as to levies paid.

3. Who should do what in realising the way forward?

- Ministry of Lands and Forestry and Forestry Commission should review policy to lift the ban. They should also look at the implications of legalising the chainsaw operations in terms national interest.
- Forest Services Division and Forestry Commission should collaborate to develop and organise training programs which will lead to certification for chainsaw operators. Also if it should be legalised, they should come out with the regulations within which chainsaw activities will be accommodated.
- Researchers: should commission more research on the operations of the chainsaw lumbering and its future effects on the forest and environment when legalised.
- NGOs: should strengthen advocacy role, by organizing training programs more workshops to review status of the chainsaw operators.
- Chainsaw operators: should be encouraged to form cluster based on locations, engage in sensitising the members; develop code of ethics for members and assist in monitoring.
- Landowners and communities; should be made to benefit directly from resources and also involve themselves in the protection of the resource.

Supply and demand

1. Do we know the actual size of the local market?

It was agreed that there is no substantial data that states the actual size of the local market. Also it will be difficult to determine it.

2. What is the way forward?

- A study should be commissioned to determine the size of the local market, demand and supply.
- Tax on lumber export should be increased and an incentive given to saw millers to supply the local market.
- Appropriate alternatives to wood like bamboo and rattan should be sourced
- Chainsaw lumber production must be legalized and controlled.

- Chainsaw operations must be restricted to off-reserves
- The operators should be encouraged to form an association
- Chainsaw operators must be properly trained and helped to acquire appropriate equipment for the industry
 - Concessions should be given to the association after its formation
 - Chainsaw operators must be required to replant degraded lands
- Operators should be trained in alternative livelihoods such as snail farming, grasscutter rearing, and black pepper cultivation among others.

3. Who should do what?

- Forestry commission should organize training programmes in conjunction with identifiable groups.
- Ministry of Lands and Forestry should review existing policies to conform to the realities on the ground
- Researchers should also be encouraged to research more into alternative building materials.
- Forestry Commission, landowners and communities should enforce tight controls.
- Non-Governmental Organizations should be involved in plantation and education programmes.
- Wood sellers should be encouraged to buy from the operator associations.

In all the above, there would be the need to embark on comprehensive, independent and collaborative study into the issue at hand.

CLOSING

The Chairman in his closing remarks thanked members for the fruitful discussion which he believed would give impetus to all stakeholders to forge ahead. He added that whatever benefits the present generation are enjoying from the forest should be extended to future generation. There is therefore the need to regulate the chainsaw menace by all stakeholders. The need to focus on sustainability was also stressed.

Since the house unanimously agreed on the legalisation of the chainsaw lumber operation, he stressed the need to embark on the following:

- Reforestation
- Plantation programme initiated by the Government should be embraced by all.

He indicated that issues with respect to our forest should be critically examined by all so that it will be beneficial to the future generation.

TBI –GHANA'S REMARKS

The Programme Team Leader thanked the chairman for steering affairs to a successful end. He extended his appreciation to the minister for having spent his time to participate in the programme. He also extended his gratitude to all the stakeholders for their patience, suggestions and criticisms and said the workshop proceedings would be put together and presented to the appropriate quarters.

The meeting came to a successful end at 7:30pm

RAPPORTEURS

Mrs. Comfort Konto
 Mr. Kwabena O. Asubonteng
 Mr. Henry N.A. Aryeetey
 Miss Anneke Wieman
 Miss Olivia Larbi-Nyanteh