

Chapter 6

6 : SUMMARY AND CONCLUSIONS

6.1 : *Summary*

Kyoto protocol serves the important purpose of committing the industrialized countries to reduce their GHG emissions to achieve the ultimate objective of stabilizing the global GHG concentrations at a level that will prevent dangerous human interference with the climate system. The protocol established three independent trading mechanisms (IET, JI and CDM) that will enable these countries to achieve their reduction targets in the most economical manner. A global carbon emission market is created by these trading mechanisms, which will lead to an economically efficient solution by directing resources to least-cost emission reduction opportunities.

Out of the three emission reduction mechanisms, CDM is the most important trading mechanism available for the developing countries like Sri Lanka. CDM enables the selling of CERs awarded for the emission reductions obtained by the environmentally friendly project activities carried out in non Annex I countries to the Annex I countries for the purpose of setting off against their emission reduction targets. Still CER trading is in its infancy and long way off from having perfect market conditions. Liquidity of CERs as a tradable commodity is very low and there is high degree of price volatility in the few transactions that are taking place.

Twenty one CDM projects are already under way in Sri Lanka and almost all of these projects are power generation projects based on renewable energy sources. All the projects are financially viable on their own without considering the proceeds from the sale of CERs. However this type of investments are considered highly risky given the long pay back periods, large initial cash outflows, dependency on weather conditions and many more other factors. With additional financial benefits available under CDM of Kyoto Protocol, industrial community is starting to turn their attention to this much neglected but very important sector of the economy.

However the lengthy and complex negotiation process currently available for selling the CERs is a major concern for many of the private companies who are trying to obtain best possible price for their carbon credits. Factors like small project size, limited access to

buyers and unavailability of demand side competition has greatly reduced the bargaining power of these local CDM implementers. Due to above reasons, only less 12 % of the local CDM potential available has been currently considered for implementation by the private sector. Local industrial sector has to act quickly because the period during which they have to trade the carbon credits is fast approaching. There is a lengthy process for getting each project certified and the potential projects should get the certification before the commitment period begins in 2008. In addition to the certification, these projects should become operational by 2008 to be able to sell the credits for the full commitment period.

Elsewhere in the world, a liquid carbon market is available for some other types of carbon emission products. One noticeable characteristic of these carbon markets is the availability of several electronic trading systems enabling a liquid carbon market.

6.2 : Findings

CDM enables the achievement of global GHG emission reductions in the most financially efficient manner by directing resources to least-cost emission reduction opportunities. The economic surplus generated by a CER transaction equals to the difference between the marginal GHG abatement cost for the buyer and the seller of CERs. One important characteristic of most of the local CDM projects is that they are profitable or financially viable on their own without considering the sale proceeds from the CERs generated by the project. Therefore as far as the CER transaction is considered, the carbon credits come at a zero or negative net cost. This situation has enabled implementation of many CDM projects with local funds or investments and the CERs generated by the projects will be available for sale on the global emission market. The main reason for these projects to be profitable is the fact that the electricity generation cost in Sri Lanka is very high due to over dependent on diesel-based power plants. With the soaring oil prices, many power generation projects based on renewable energy sources have become financially viable.

However most of these projects would not have been implemented in the absence of carbon trading under CDM and Kyoto protocol due to many reasons. This is because it is considered too risky to invest money in this type of projects by private companies in the absence of an incentive similar to carbon trading. Even though these projects are profitable in the long run, they have very long payback periods compared to other types

of investments the private sector is comfortable with. The payback period for the CDM projects currently under way in Sri Lanka range from 7 years to 15 years without considering the proceeds from sale of carbon credits and depending on the type of the project. Another factor affecting the risky nature of this type of investment is related to the cash flow profile of these projects. Most of these projects involve large initial capital outflow for the implementation of the project. The profitability will also depend on the average cost of electricity generation in Sri Lanka, which is highly dependent on global oil prices.

According to the data collected on the local CDM projects, the process of selling CERs obtained for the CDM projects is a complex and a lengthy process. There are only few institutional investors currently offering to buy CERs from non-Annex I countries and there is little information available about these investors to the local companies. The process of negotiating the sale of CERs typically takes around six to eight months depending on the investor. Most of these institutional investors have lot of bargaining power and the local companies rarely can demand a price higher than that offered by the buyers. Most of the local CDM projects are very small and the number of CERs generated by these projects does not generate enough interest in the investors to go after these projects. Due to above reasons, the liquidity of CER market is very low and the CER price is highly volatile. Only a handful of the local CDM projects have already obtained funding for the CERs and the average price is around USD 7 per tC. The total carbon emission reductions generated by the 21 prospective projects equals to 2.6 million tones of CO₂ equivalent. This is about 0.25 % of the total carbon emission reductions required by the Annex I countries. Compared to the total CDM potential available in Sri Lanka in the sector of power generation using renewable energy sources, only 12 % is covered by the already started 21 projects.

However there are well established carbon emission markets in USA and end Europe enabling trading of different carbon products other than CERs generated from CDM projects. As far as meeting the emission reduction targets under Kyoto Protocol is concerned, these carbon products can be substituted one to one with CERs since a unit of all these carbon products represents 1 metric ton of CO₂ emission reductions. One notable feature of these carbon markets is the availability of electronic trading systems that facilitate trading of different types of carbon products, creating perfect market conditions for these carbon products. The average trade price on these trading systems for the different carbon products during the month of September 2005 is around USD 25. Based

on the price of substitute products and other factors, CERs should have a price of around USD 20 under perfect market conditions.

6.3 : Conclusions

An electronic trading system is proposed for the purpose of trading CERs. The aim of the trading system is to improve the liquidity and trading efficiency of CERs and to reduce the price volatility by creating perfect market conditions. Based on the characteristics of the CERs as a tradable commodity, existing regulatory framework for CDM and the characteristics of the trading community, a trading model is derived for the proposed electronic trading system. The proposed trading system would incorporate anonymous trading where the identity of the buyers and sellers will not be disclosed to the market. This feature will make sure that all CERs that will be traded on the trading system will be treated equally irrespective of the host country or the type of the project. However to allow any buyers the ability to prevent investing in specific type of project or a host country, a facility should be provided to specify an exception list against which the buy order should not trade against.

Buy and sell volumes will be displayed to the market after aggregating all the orders at a given price. This will make sure that all buy and sell orders will be treated similarly irrespective of the size of the order. This will prevent any disadvantage caused by small size of CDM projects. A facility will be provided where by the traders can specify that their orders should not get partially executed. This feature will make sure that the order is either fully executed or not executed at all. The trading system would also allow execution of transactions already negotiated outside the trading system. Two traders can enter buy and sell orders with a unique transaction ID into the system. The system will then match these orders together and generate a trade. The buy and sell orders will not be shown in the order book to the other participants of the trading system. As the price of this type of trades is negotiated outside the trading system, the last traded size will not be updated based on this transaction. The last trade price for the trading system will be taken from a moving average form the trades that have taken place in the system. This done in order to provide the general direction of price movement without giving all the price variations based on each trade.

Based on the liquidity of the commodity, responses received from the private companies and information available for other trading systems, following commission structure is

proposed for the trading system. This is a flexible commission structure to enable large institutional investors to trade in the trading system without paying excessive transaction commission.

Standard commission on a transaction 2 % consisting following components

- ✓ Brokerage commission : 1 %
- ✓ Commission for the exchange : 0.75 %
- ✓ Other commissions : 0.25 %

For transactions involving more than 1 million CERs

- ✓ Brokerage commission : Negotiable between broker and buyer or seller
- ✓ Commission for exchange : 0.25 %

According to the data analysis carried out based on different variables and parameters, it is concluded that implementation of an electronic trading system to trade CERs will enable efficient trading of the commodity by establishing perfect market conditions and by avoiding various other problems associated with existing trading mechanisms available.



The proposed electronic trading system will establish perfect market conditions by bringing together prospective buyers and sellers of CERs into a single place. The geographically dispersed buyers and sellers will have access to the trading system over the Internet or leased lines. The trading system will distribute latest price information online to all the participants of the trading system as and when transactions take place. Price information will become publicly available over the Internet for anyone interested.

The proposed electronic trading system will enforce equal status for all the participants, avoiding the problem of unequal bargaining powers of buyers and sellers. Small CDM projects with a small number of CERs to be sold will have the same bargaining power as a large CDM project. On the other hand, relatively small Annex I parties requiring small number of CERs for the compliance of reduction targets can easily acquire the required carbon credits from the pool of liquidity that will be available in the trading system.

The proposed electronic trading system will avoid the existing lengthy negotiation process required to sell the CERs. The latest straight through processing technologies

available in the electronic trading systems would allow the immediate settlement of sales proceeds between the buyers and the sellers and the immediate transfer of CERs between the carbon credit registries for the two participants. This will reduce the high transaction costs involved with the existing negotiation process for selling CERs, which is often very complex and lengthy.

There are few drawbacks related to the implementation of an electronic trading system to trade CERs. One major drawback is the restriction placed on the transferability of the CERs under the regulatory framework of CDM. The ownership of CERs can only be transferred once from a non Annex I party to an Annex I party. This restriction can greatly reduce the number of transactions taking place in the electronic trading system, thus reducing the revenue generated through transaction commission. This problem exists even for the existing trading mechanisms for CERs, hence will not affect our analysis. The analysis of financial feasibility was carried out taking account of this restriction. Even though all CERs are homogeneous according to the regulatory framework of CDM, there are some properties of CERs that make them different from each other from the point of view of the party that buys the CERs. These two properties are the host country and the type of project. Some Annex I parties might want to avoid investing in specific host countries or invest in specific project types. The proposed trading system will have a feature that will allow the traders to achieve this by providing a list of exceptions against which they don't want their orders to match against.

Due to all above reasons, an electronic trading system will be able to provide perfect market conditions for the trading of CERs generated by CDM projects and will be able to bring together a wide audience of buyers and sellers into one trading system. This will help to improve the liquidity of CERs and will facilitate the establishment of equilibrium price for CERs where the demand and supply matches each other, thus reducing the price volatility of the commodity. Establishment of such trading system will greatly benefit all the non Annex I parties, specially countries like Sri Lanka that is not a big player of the CER market in terms of generated volume.

After evaluating the demand and supply factors, regulatory framework, projected CER volumes for different countries, etc, the scope for the implementation of the proposed electronic trading system was decided. The trading system should be operational at least by early 2007 because, most of the current CDM projects will be operational by that time and the demand from all Annex I countries will considerably increase with the

commitment period from 2008 to 2012 will be getting closer by then. The ideal geographical scope to initiate the trading system is to cater for South Asian region since this region will be generating more than 10 % of global CDM projects. The required regulatory framework should be set for the region before the operations of the trading system can come into force. Initially, the trading system should facilitate spot trading of CERs and Futures contracts of CERs.

The exchange which will be operating the electronic trading system will generate its revenue from the transaction commission and annual fees paid by the brokerages participating in the trading system. Based on the proposed commission structure, the projected CER volume for the region, projected price for CERs under perfect market conditions, the cost benefit analysis indicates that the implementation of an electronic trading system to trade CERs will be financially viable. However, this will be largely dependent on the capability of the South Asian region to generate the projected volume of CERs by the start of the commitment period. The revenue generated by the trading system will be greatly affected if more than one electronic trading platform will be available for the buyers and sellers of CERs, thus reducing the profitability. Therefore, the first electronic trading system that enables trading of CERs will be able to capture the biggest market share because of the first mover advantage. According to the financial analysis, participation in the proposed trading system will be profitable for brokerages.

6.4 : Policy implications and recommendations

There are several policy implications arising based on the findings of this research study. Based on the findings of the study, lot of financial benefits can be obtained by promoting power generation projects based on renewable energy sources in Sri Lanka. If the required government policy is set up properly, the full potential for CDM projects available in Sri Lanka can be realized.

To achieve this, the necessary incentive schemes should be set up to promote CDM projects in Sri Lanka. One important requirement for the private sector to engage in CDM project activity is the easy access to funding or loan financing. If the government can set up the required policy framework to enable private companies to obtain loans from state banks in the selected power generation sectors, many companies will come forward with their plans to set up CDM projects. This will enable these companies to set up the projects with local funds and sell CERs generated by these projects at market price once

the commitment period comes into force. To make these projects more financially attractive, the proceeds from sale of CERs can be exempted from corporate tax. Another uncertainty surrounding these projects is the price at which the electricity generated by the power generation projects will be bought by the CEB. To reduce the level of uncertainty and to eliminate the risk associated with fluctuating oil prices, the government can offer long term electricity purchasing contracts for these power generation projects based on renewable energy sources.

Another important policy area is the required regulatory framework to establish a spot market in the form of an electronic trading system to trade CERs. The developing countries like Sri Lanka should lobby to push forward the required changes necessary in the regulatory framework of CDM to enable a liquid marketplace for CERs at the future Conference of Parties. This will help to achieve the required global GHG emission reductions in the most cost effective way by directing resources to the developing countries.

To set up a trading system spanning the South Asian region, it will be necessary to establish the required legal and regulatory framework within this region. One major area of concern is the limitations imposed on fund transfers between each of the parties. All countries will have to agree to a common regulatory framework, which will allow CERs generated in any country within the region to be traded on the proposed electronic trading system.

6.5 : Agenda for further study

This research study looked into the aspects trading mechanisms available for buying and selling CERs generated by CDM projects under Kyoto protocol. The analysis was carried out mainly based on the information and data provided by the sellers of the commodity, that is basically the private sector companies currently engaged in CDM projects. The same analysis should be carried out from the point of view of the buyers of the commodities, basically the Annex I parties that require carbon credits to achieve their emission reduction targets.

This research study only looked into the financial feasibility of implementing an electronic trading system to trade CERs. In addition to the financial feasibility, for this type of trading system to be successfully implemented one should look into the aspects

relating to the regulatory framework. There are different legal and regulatory considerations that will have a big impact on implementing a trading system that spans many countries and economic entities. This is a vast area that is still not been properly analyzed and can be the subject of further research. In addition to the regulatory implications, there are many other technical and operational aspects to be looked into. These technical and operational aspects can also be taken as possible further research areas.

This whole study assumed that the proposed electronic trading system is an independent entity. However there is a possibility of facilitating trading of CERs on an existing electronic trading system such as Colombo Stock Exchange of Sri Lanka or Bombay Stock Exchange of India. There are many stock exchanges around the world that enables the trading of equity trading and commodity trading on the same trading platform. This option might offer a low cost and efficient solution than implementing an independent trading system that is dedicated to trading carbon credits. This subject can also be taken as a further research area.



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Appendix A

List of the companies and the projects taken for data collection

| Name of project | Developer | Capacity | Annual emission reductions |
|--|--|------------|----------------------------|
| Magal Ganga small hydro power project | Eco-Power (pvt) Ltd., No. 21, Gower Street, Colombo 05. | 9.9 MW | 34,900 |
| Alupola and Badulu Oya small hydro power project | Eco-Power (pvt) Ltd., No. 21, Gower Street, Colombo 05. | 8.2 MW | 31,327 |
| Hapugastenna and Huluganga small hydro power project | Eco-Power (pvt) Ltd., No. 21, Gower Street, Colombo 05. | 13.55 MW | 51,435 |
| Bambarabatu Oya mini hydro power project | Vidulanka (pvt) Ltd., No. 2, Chelsea Gardens, Colombo 05. | 3.2 MW | 3,917 |
| Colombo organic waste treatment plant | Biolan (pvt) Ltd., 182/1A, 2 nd Floor, Castle Street, Colombo 08. | 56784 MWh | 244,000 |
| Wind power plant, Narakkaliya, Puttalama | Senok Trade Combine Ltd., No. 3, R.A. De Mel Mawatha, Colombo 05. | 20 MW | 65,000 |
| Pupuressa and Rupaha mini hydro power project | Free Lanka (pvt) Ltd., No 31, Layards Road, Colombo 05. | 30,300 MWh | N/A |
| Gatambe small hydro power project | Environment Management Lanka (pvt) Ltd., No 68, | 12 MW | 42,000 |

| | | | |
|---|--|----------|-----------|
| | Davidson Road, Colombo 04. | | |
| Atabage small hydro power project | Environment Management Lanka (pvt) Ltd., No 68, Davidson Road, Colombo 04. | 3 MW | 10,500 |
| Power generation and manufacture of coconut shell charcoal | Haycarb Ltd., No 400, Deans Road, Colombo 10. | 8 MW | 100,000 |
| Dendro and hydro power project | Lanka Transformers Ltd., No 67, Park Street, Colombo 02. | 6 MW | 21,000 |
| Biomass power plant in Ampara | Energeon Power (pvt) Ltd., No. 38/25 A, Circular Road, Anniwatte, Kandy. | 15 MW | 90,000 |
| 300 MW wind power project | Dauids Engineering (pvt) Ltd., No 46, Dr. N.M. Perera Mw, Colombo 08. | 300 MW | 1,050,000 |
| Biomass power generation project in Trincomalee | Tokyo Cement Company (Lanka) Ltd, No. 469 1/1, Galle Road, Colombo 03. | 6.6 MW | 49,807 |
| Bibile mini hydro power project | SJL Holdings (pvt) Ltd., No. 692/1, Peradeniya Road, Kandy. | 12.25 MW | 44,693 |
| Labuwewa mini hydro power project | Aqua Power (pvt) Ltd., No. 79/5, | 2 MW | 4,965 |

| | | | |
|---------------------------------------|--|----------------|---------|
| | Horton Place, Colombo 07. | | |
| Dambulla bio fuel project | Vanasaviya Foundation, Laxhapana Estate, Matale Road, Dambulla. | 15,000 kg seed | 750,000 |
| Asupiniella small hydro power project | Nividhu Asupinielle Pvt. Ltd., No 67, Park Street, Colombo 02. | 4 MW | 15,462 |
| Walapane dendro power project | Lanka Transformers Limited, No. 67, Park Street, Colombo 02. | 1 MW | 6,020 |



Appendix B

Questionnaire sent to the private companies engaged in CDM projects

Research on feasibility of implementing a Trading Exchange to trade Carbon Emission Credits under Kyoto Protocol

Please answer questions to best of your knowledge and leave any question unanswered if you don't like to disclose the information or required information is unavailable.

1) What is the nature of the project you have undertaken to qualify for Carbon Emission Credits (CERs) under Kyoto protocol?

- Small hydropower generation
- Wind power generation
- Bio mass power generation
- Solid waste management
- Reforestation
- Other (please specify)

2) What is the estimated CO₂ reduction from the project?

-tons of CO₂ per year
- Not yet estimated

3) What is the stage of certification?

- CERs obtained
- PIN is prepared
- In principle letter issued by Environment Ministry
- Feasibility study completed
- Other (please specify)



4) Is the project financially viable without selling Carbon Credits?

- Yes
- No
- Not sure

5) If your answer to question 4 is yes, what is the pay back period for the project without considering carbon credits?

- years
- Not sure

6) If your answer to question 4 is no, what is the value for carbon credits to break even the project?

- Rs. per ton of CO₂
- Not sure

7) Will you undertake the project if not for the possibility of selling carbon credits under Kyoto protocol?

- Yes
- No
- Not sure

8) When will the project be operational?

- Already operational
- In years
- Not sure

9) What are the reasons you think that makes it difficult to sell carbon credits?

- Small size of the project
- Don't know how to access the buyers
- Not enough opportunities for buyers and sellers to meet
- Buyers are demanding at a lower than expected price
- Transaction cost is too high
- Others (please specify)

10) Do you think it is too risky to invest in a project expecting a return from sale of carbon credits?

- Yes
- No
- Comments (if any)

11) Have you already obtained funding or negotiated sale of carbon credits?

- Yes
- No



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If your answer to question 11 is yes, please answer questions 12 to 15

12) How did you obtain funding for carbon credits?

- Sold at Carbon Expo
- Sold directly to a foreign company
- Obtained funding from World Bank fund
- Other (please specify)

13) For how many years funding has been negotiated?

..... years

14) What is the price obtained per ton of CO₂?

- Rs. per ton of CO₂
- Do not wish to disclose

15) How much of expenses were incurred for obtaining funding/Selling Carbon Credits?

..... Rs. as commission for third parties
..... Rs. as traveling expenses

..... Rs. as communications costs

..... Rs as other costs

or

Do not wish to disclose

If your answer to question 11 is no, please answer questions 16 to 18.

16) Are you planning to sell carbon credits before 2008 commitment period?

Yes

No

Not sure

17) What are the funding avenues already sought?

Participated in Carbon Expo

Negotiated with foreign companies

Negotiated with World Bank funds

Other (please specify)

18) At what price you are trying to sell carbon credits generated by the project?

..... Rs. per ton of CO₂

Do not wish to disclose

19) How did you value the carbon credits?

Cost + margin

Current available price

Highest offer from funding party

Other (please specify)

Please answer the rest of the questions assuming that a trading system is established to buy and sell carbon credits. Assume trading will take place through a broker similar to stock trading at Colombo Stock Exchange.

20) Would you prefer to sell carbon credits on a trading exchange rather than obtaining funding through currently available methods?

Yes

No

Not sure

21) How much brokerage commission you are willing to pay?

Less than 2 % of sales vale

Between 2 % - 5 % of sales vale

Between 5 % - 10 % of sales vale

More than 10 % of sales vale

22) Would you like to sell forward contracts (sell CERs at an agreed price to be delivered on a later date) on the trading exchange?

- Yes
- No
- Not sure

23) Do you prefer to participate in an auction in a trading system to sell carbon credits?

- Yes
- No
- Not sure

24) Will you undertake additional projects if there is a trading system to sell carbon credits?

- Yes
- No
- Not sure

25) Any further comments on currently available methods of selling carbon credits

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.....

.....

.....

26) Any further comments on suitability of implementing a trading exchange for buying and selling carbon credits

.....

.....

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.....

.....

Thank you for your valuable time spent on answering the questionnaire.

Appendix C

Annex 1 countries specified by UNFCCC and their respective reduction targets.
(Source : Annex B – Kyoto protocol)

| Country | Reduction Target |
|----------------|------------------|
| Australia | - 8 % |
| Austria | 8 % |
| Belarus | 8 % |
| Belgium | 8 % |
| Bulgaria | 8 % |
| Canada | 6 % |
| Croatia | 5 % |
| Czech Republic | 8 % |
| Denmark | 8 % |
| European Union | 8 % |
| Estonia | 8 % |
| Finland | 8 % |
| France | 8 % |
| Germany | 8 % |
| Greece | 8 % |
| Hungary | 6 % |
| Iceland | - 10 % |
| Ireland | 8 % |
| Italy | 8 % |
| Japan | 6 % |
| Latvia | 8 % |
| Liechtenstein | 8 % |
| Lithuania | 8 % |
| Luxembourg | 8 % |
| Monaco | 8 % |
| Netherlands | 8 % |
| New Zealand | 0 % |
| Norway | - 1 % |
| Poland | 6 % |

| | |
|--------------------------|-----|
| Portugal | 8 % |
| Romania | 8 % |
| Russian Federation | 0 % |
| Slovakia | 8 % |
| Slovenia | 8 % |
| Spain | 8 % |
| Sweden | 8 % |
| Switzerland | 8 % |
| Turkey | 8 % |
| Ukraine | 0 % |
| United Kingdom | 8 % |
| United States of America | 7 % |



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Appendix D

Income statement of Colombo Stock Exchange for the year ending 31st December 2003. (Source : Annual report – Colombo Stock Exchange)

INCOME STATEMENT

For the year ended 31st December 2003

| | Note | Consolidated | | CSE | |
|----------------------------------|------|--------------------|--------------|--------------------|--------------|
| | | 2003 Rs. | 2002 Rs. | 2003 Rs. | 2002 Rs. |
| INCOME | 12 | 243,537,236 | 111,060,719 | 182,561,888 | 85,149,013 |
| Other Operating Income | 13 | 55,648,334 | 54,166,212 | 45,920,744 | 47,909,208 |
| Total Income | | 299,185,570 | 165,226,931 | 228,482,632 | 133,058,221 |
| EXPENSES | | | | | |
| Staff Cost | 14 | 42,008,131 | 31,116,907 | 34,383,569 | 25,165,604 |
| Depreciation | 2 | 17,071,064 | 17,965,625 | 17,071,064 | 17,965,625 |
| Amortisation of Development Cost | 3 | 300,240 | 300,240 | 300,240 | 300,240 |
| Other Operating Expenses | 15 | 66,174,812 | 53,800,731 | 48,087,705 | 38,659,395 |
| Total Operating Expenses | | 125,554,247 | 103,183,503 | 99,842,578 | 82,090,864 |
| Profit before Taxation | | 173,631,323 | 62,043,428 | 128,640,054 | 50,967,357 |
| Taxation | 16 | (40,340,848) | (13,346,669) | (25,734,865) | (10,946,669) |
| Net profit for the year | | 133,290,475 | 48,696,759 | 102,905,189 | 40,020,688 |

The Notes to the Accounts form an integral part of these financial statements.

Appendix E

Income statement of John Keels Stock Brokers (pvt) Ltd. for the year ending 31st March 2005. (Source : Annual report – John Keels Holdings (pvt) ltd.)

SUBSIDIARY : JOHN KEELS STOCK BROKERS (PVT) LTD.

Directors of the Company : Mr. V. Lintotawela (Chairman), Mr. S.C. Ratnayake, Mr. A.D. Gunewardene, Mr. G.S.A. Gunsekera, Mr. J.R.F. Peiris, Mr. T. Ratnayake.

Year of Incorporation : 1979

Principal Activities : Share Broking

Capital Structure :

| No. of Shareholders | | Issued Share Capital (Rs.000's) | | Holding Percentage (%) | |
|---------------------|------|------------------------------------|-------|---------------------------|------|
| 2005 | 2004 | 2005 | 2004 | 2005 | 2004 |
| 8 | 8 | 7,500 | 7,500 | 76 | 76 |

Operating Performance :

| Gross Turnover (Rs.000's) | | Net Profit/(Loss) before Tax (Rs.000's) | | No. of Employees | |
|------------------------------|---------|--|---------|------------------|------|
| 2005 | 2004 | 2005 | 2004 | 2005 | 2004 |
| 138,540 | 237,852 | 65,747 | 167,816 | 26 | 25 |



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