# HATTON PLANTATIONS LTD

Research Report

**Financial Advisor and Joint Manager to the Introduction**

**NDB Investment Bank Limited**

November 22, 2017

NDB Investment Bank
Level 1, NDB Capital Building,
No. 135, Bauddhaloka Mawatha,
Colombo 4, Sri Lanka.
Tel: +94 11 2300385 - 90 | Fax: +94 11 2300393
E-mail: info@ndbib.com | Website: www.ndbib.com

November 22, 2017

Board of Directors
Hatton Plantations Ltd
No. 60, Dharmapala Mawatha
Colombo 03.

Dear Sirs,

**REFERENCE PRICE FOR THE LISTING OF SHARES OF HATTON PLANTATIONS LTD ("HPL") VIA AN INTRODUCTION**

We refer to the Research Report submitted on October 20, 2017 by us, in the capacity of Financial Advisors and Joint Managers to the Introduction of HPL, in accordance with Section 3.4.8. b (iii) of the Listing Rules of the Colombo Stock Exchange. Through letter dated November 20, 2017, Colombo Stock Exchange has requested us to update the Research Report since all the Plantation companies have published their quarterly reports for September 30, 2017 subsequent to the issue of initial Research Report.

The updated valuation leads to the following valuation results.

| | Net Asset Value Method | Discounted Cash Flow Method | Peer Median EV/EBITDA | Peer Median P/BV | Average |
|---|---|---|---|---|---|
| **Equity Value of HPL (LKR Mn)** | 1,856.2 | 1,661.3 | 2,247.6 | 1,619.5 | 1,846.2 |
| **Value per Share (LKR)** | 7.84 | 7.02 | 9.50 | 6.84 | **7.80** |

Based on the updated valuation, the intrinsic value of HPL shares is within the range of **LKR 6.84 to LKR 9.50.** Given the Company's business fundamentals and the industry dynamics, NDBIB believes that the HPL shares would have a fair value of c. LKR 7.80 per share.

Hence, NDBIB revised its recommendation to a price of **LKR 7.80 per share** as the Reference Price for trading purposes of HPL shares at the Colombo Stock Exchange.

The updated Research Report is enclosed herewith for your reference.

Thank you.

Yours faithfully,
**NDB INVESTMENT BANK LIMITED**

**Darshan Perera**
**Director/Chief Executive Officer**

# TABLE OF CONTENTS

**DEFINITIONS AND INTERPRETATIONS**

The following definitions/interpretations apply throughout this Introductory Document, unless the context otherwise requires:

| | |
|---|---|
| **“Avg”** | Average |
| **“AWPLR”** | Average Weighted Prime Lending Rate |
| **“BC”** | Bought Crop |
| **“BMF”** | Broken Mixed Fannings |
| **“Bn”** | Billion |
| **“c.”** | Approximately |
| **“cf.”** | Compared to |
| **“CAGR”** | Compound Annual Growth Rate |
| **“COP”** | Cost of Production |
| **“CSE”** | Colombo Stock Exchange |
| **“CTC”** | Cut, Tear and Curl |
| **“DCF”** | Discounted Cash Flow |
| **“EBITDA”** | Earnings before Interest, Tax, Depreciation and Amortisation |
| **“EV”** | Enterprise Value |
| **“FY”** | Financial Year |
| **“HPL”, “the Company”** | Hatton Plantations Ltd |
| **“HR”** | Human Resource |
| **“JEDB”** | Janatha Estates Development Board |
| **“kg”** | Kilogram |
| **“LKR”** | Sri Lanka Rupees |
| **“MENA”** | Middle East and North Africa |
| **“Mn”** | Million |
| **“MT”** | Metric Tonnes / One Thousand Kilograms |
| **“NAV”** | Net Asset Value |
| **“NDBIB”** | NDB Investment Bank Limited |
| **“NSA”** | Net Sales Average |
| **“p.a”** | Per Annum |
| **“P/BV”,”PBV”** | Price to Book Value Ratio |
| **“P/E”** | Price to Earnings Ratio |
| **“PLC”** | Public Limited Company |
| **“PP&E”** | Property Plant and Equipment |
| **“Qty.”** | Quantity |
| **“RPC”** | Regional Plantation Company |
| **“SLSPC”** | Sri Lanka State Plantations Corporation |
| **“TTM”** | Trailing Twelve Months |
| **“USD”** | United States Dollars |
| **“VP”** | Vegetatively Propagated |
| **“WATA”** | Watawala Plantations PLC |
| **“YPH”** | Yield per Hectare |
| **“YoY”** | Year on Year |

## 1.0 BACKGROUND

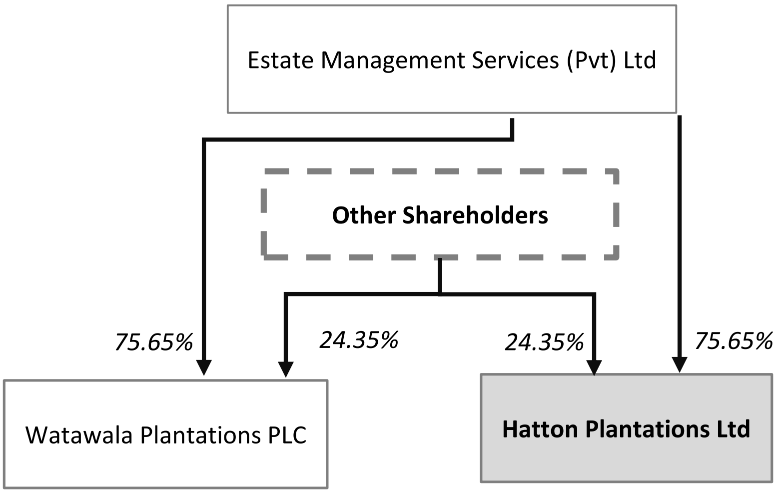
Hatton Plantations Ltd ("HPL" or "the Company"), was incorporated on September 14, 2017 as a part of the Arrangement proceedings carried out by Watawala Plantations PLC ("WATA") under the Section 256 of the Companies Act No. 07 of 2007. As per the Arrangement proceedings, the operational assets and liabilities of the Upcountry Tea Business Segment of WATA were vested to HPL on September 30, 2017 and the Company issued HPL shares mirroring the shareholding of WATA as at end of day trading on September 29, 2017. Subsequently, the shares of HPL are expected to be listed in Colombo Stock Exchange ("CSE") via an Introduction.

In this regard, the Board of Directors of Hatton Plantations Ltd has appointed NDB Investment Bank Limited ("NDBIB") as the Financial Advisor and Joint Manager to the proposed listing of HPL via an Introduction. In compliance with Section 3.4.8. b (iii) of the Listing Rules of the Colombo Stock Exchange ("CSE"), NDBIB in the capacity of the Financial Advisor and Managers to the Introduction has carried out a valuation on the shares of HPL for the purpose of ascertaining the reference price.

The assessed valuation and the underlying assumptions pertaining to the same are set out in this Research Report.

### 1.1. Hatton Plantations Ltd ("HPL" or "The Company")

The shareholding structure of HPL post Arrangement is as given below;




The vested Upcountry Tea Business Segment is involved in the cultivation and production of Tea from 17 estates located in the hills of the Central Province of Sri Lanka. These estates have over 4,465 hectares of arable land at elevations reaching 4,800 feet above the sea level. Apart from the estates, the factory buildings, bungalows, other buildings and structures, plant and machinery, fixtures and fittings located on these estates, movable properties including vehicles lying in or around the tea estates, third party warehouses and certain equipment identified with the Upcountry Tea Business Segment lying at the head office, certain identified trademarks relating to tea, investment in mini hydro power projects, etc. were vested to HPL through the arrangement proceedings. Similarly, all the liabilities relating to the Upcountry Tea Business Segment were vested to HPL through the arrangement proceedings. Hereinafter the operations of Upcountry Tea Business Segment would be referred as HPL in this Research Report.

HPL produces high and medium grown teas in the key regions of Hatton, Watawala and Lindula and uses both Orthodox and CTC (Cut, Tear, Curl) manufacturing methods. Given the versatility in the production facilities, the Company is well-positioned to cater to different export and local market preferences. Presently, HPL owns 11 factories with a total daily processing capacity of approximately 232,300 kg of green leaf. Majority of the tea processed at HPL, c. 90%, is sold at the Colombo Tea Auction through brokers while the remaining production is directly sent to buyers.

## 2.0 INDUSTRY OVERVIEW

### 2.1. Tea Industry Background

Tea is considered to be the second most popular drink in the world after water. The tea plantation was introduced to Sri Lanka by the British in the 19th century and currently Sri Lanka is the fourth largest tea producer and the third largest tea exporter in the world and has been known for its premier black tea with the strong brand equity of “Ceylon Tea”. Tea is also the third highest foreign exchange earner for Sri Lanka and accounts for c. 14% of total exports (Source: Central Bank Annual Report 2015/16) and contributes c. 2.0% (Source: Sri Lanka Tea Board) to the GDP of Sri Lanka.

The significance of the tea industry to the national economy is further enhanced in respect to socio-economic development, poverty reduction and environmental conservation initiatives the sector consciously engages in. The entire plantation sector of Sri Lanka employs, directly and indirectly, over 1.2 million people, and in addition, tea planting by smallholders is the source of employment for thousands whilst it is also the main form of livelihoods for tens and thousands of families. Besides the 22 Regional Plantation Companies (“RPC”) the industry consist of hundreds of smallholders who contribute c. 60% of total production of the country. (Source: Watawala Plantations PLC – Annual Report 2016/17)

Being a commodity, the Tea industry is vulnerable to global demand and supply factors and as a result individual produces more often become price takers. The demand could vary significantly in the short run due to geopolitical conditions, macro-economic factors among key export markets, the prices of substitute beverages e.g. coffee, cocoa etc. and the changes in consumer preferences. The key supply factors would primarily include the changes in weather patterns, availability of arable land and soil conditions, and the availability and productivity of labour.

#### 2.1.1. Demand Factors

China and India are the largest consumer of tea, but the two countries are also the largest producers of tea. Hence, they are net exporters of tea. The demand for tea imports are mainly driven by Russia, countries in the Middle East and North Africa (“MENA”) region, Western Europe and USA. The top 5 importers of Tea accounts for 83% of global Tea imports and includes Russia, UK, USA, Pakistan and Egypt. The countries in MENA region has the highest per Capita tea consumption and Turkey is the global leader with an average per capita tea consumption of 7.7kg per annum. (Source: FaoStat Reports)

The high geo-political sensitivity among the countries in MENA and Russia has contributed significantly towards the fluctuations in global import demand for Tea. Further, crude oil prices are a key determinant of import demand from MENA given the significant reliance of crude oil income by the countries of this region.

In terms of the substitutes, Coffee is the main substitute for tea as a caffeine based product. Historically the tea prices have been positively correlated with coffee prices. A forecast of increasing coffee prices would have a positive impact on Tea.

Since Tea being mostly consumed as a hot beverage, the consumption patterns have a seasonality. The volume of tea imports is high during the winter and slows down during summer.

Globally there is an increasing trend for more value-added tea. The value-added tea segment helps the producers to improve margins since the product differentiation allows the producers to be less reliant on prices determined by the markets. Sri Lankan tea planters are in a position to capitalise on this new trend since the Sri Lankan tea is renowned for its high quality, unique aroma and taste. The presence of three major geographical zones and the unique methods of plucking have given the Sri Lankan planters a variety of specialities of the tea products in Sri Lanka. Further, Sri Lankan Tea industry has consistently managed to maintain the quality of the product and hence the brand “Ceylon Tea” carries a significant brand equity with it in the global markets.

### 2.1.2. Supply Factors

The Tea cultivation is generally confined only to certain regions of the world due to specific requirements of agro climatic conditions and soil. The tea cultivating areas are mainly in Asia and Africa. China, India, Sri Lanka and Indonesia are the key producers in Asia while Kenya, Malawi, Rwanda, Tanzania and Uganda are the key producers in Africa. Global annual production of tea has been growing at a CAGR of 4.3% from 2003 to 2013.

The Tea supply in the short run could vary significantly due to weather conditions among tea producing countries. Tea cultivation is strongly correlated to climate conditions. Whilst rainfall impacts the quantities produced, climatic conditions of plantation imparts to the product a variety of flavours and aromas, synonymous with quality. Since weather patterns are becoming erratic and unpredictable owing to global warming, controlled production of specific varieties has become a challenge for the industry.

The humidity, cool temperature, and rainfall of Sri Lanka's central highlands provide a climate that favours the production of high-quality tea. On the other hand, tea produced in low-elevation areas such as Matara, Galle and Ratnapura districts with high rainfall and warm temperature has high level of astringent properties. The tea biomass production itself is higher in low-elevation areas. Such tea is popular in the Middle Eastern countries.

The availability of arable land and soil conditions is one of the main factors affecting the Global Supply of tea. The top 4 producers of tea namely, China, India, Kenya and Sri Lanka accounts for approximately 70% of the Global Tea Production. (Source: Statista Reports) However, China and India are facing the threat of scarcity of land for cultivation due to the increased competition for land as a result of the accelerating population growth in their countries.

Tea plantations are highly labour intensive and generally requires 1 worker for every 0.5 hectares. Globally, the labour costs accounts for more than 50% of the total production cost base for tea. The plantations around the world are affected by shortage of labour. Additionally, the plantation sector in Sri Lanka is heavily unionised and almost all the employees in RPCs are under collective agreements with their employers. The scarcity of labour and the prevalence of labour unions have resulted in relatively higher daily wages in Sri Lanka compared to its key counterparts. Simultaneously, Sri Lanka has been recording the lowest productivity per employee. The amount of tea plucked by an employee per day is just 18kg in Sri Lanka cf. 28kg in Indian and 48kg in Kenya (Source: The Financial Times, March 2015). Higher wages and low productivity have caused the Sri Lankan Plantation sector to incur significantly high labour costs compared to its counterparts. The labour cost as a percentage of total production cost is more than 70% for Sri Lankan planters. This has negatively affected the Sri Lankan supply of tea to the Global Market.

## 3.0 FORECASTING METHODOLOGY AND SOURCES OF INFORMATION

The following methodology was adopted in forecasting the financial statements of HPL:

I. The financial statements were forecast for a period of five years based on the business plans of HPL;
II. Inputs from the key management of HPL were obtained with a view to better understand the nature of the operations of the respective companies;
III. The Audited Financial Statements and the Management Accounts of WATA were analysed in order to review the historical performance of the Upcountry Tea Business Segment and to identify possible trends and key performance indicators;
IV. Future growth plans of HPL have been duly incorporated in the forecast financials based on discussions with the Management.
V. The forecast financial performance for HPL was assessed in light of the future outlook for tea sector during the next five years.

The Financial Advisor and Joint Manager to the Introduction has established that all assumptions used in the forecasts and outlook given in this report are fair and reasonable to the best of their knowledge.

## 4.0 FORECAST ASSUMPTIONS

### 4.1. Revenue Assumptions

#### 4.1.1. Production

**Land Extent**

HPL owns 17 tea estates which are spread across Watawala, Lindula and Hatton regions. The total mature plantation extent was 3,827 hectares as at March 31, 2017. Currently, the Company is not contemplating on increasing its land extent and has not planned a major replanting initiative for the foreseeable future. NDBIB assumed that the amount of land taken out for replanting would be approximately similar to the amount of immature land released for harvesting. Accordingly, total mature plantation as at March 31, 2017 was expected to remain the same during the forecast period.

| Mature Extent as at March 31, 2017 | Hectares |
|---|---|
| Watawala | 865 |
| Hatton | 1,393 |
| Lindula | 1,570 |
| **Total** | **3,827** |

**Yield Per Hectare ("YPH")**

The total in-house tea production was forecasted based on the amount of final produce manufactured per a Hectare of land extent i.e. Yield Per Hectare. The Yield per Hectare varies based on each sub region and hence YPH for the three regions was forecasted separately. Historical YPH for HPL saw a sudden drop in FY2016 and FY2017 following the adaptation of "quality driven" strategy where the management focusing on producing lesser quantity of tea at a superior quality rather than focusing on maximizing YPH. However, YPH for HPL estates increased by 28.3% in the first four months of FY2018F compared to the same period last year. The improvement is attributable to favourable weather conditions and the Company's efforts to capitalise the higher demand prevailed in the auction during this period.

NDBIB expects the increase in YPH to continue for the rest of FY2018F in the absence of any adverse market conditions foreseen for the rest of the year. The YPH beyond FY2018F was assumed to increase at a lower rate of 2% on a year-on year basis as NDBIB expects the Company to not to focus on maximizing YPH.

| Yield Per Hectarage (kg) | FY2017 | FY2018F | FY2019F | FY2020F | FY2021F | FY2022F |
|---|---|---|---|---|---|---|
| Watawala | 1,269 | 1,428 | 1,457 | 1,486 | 1,515 | 1,546 |
| Hatton | 1,224 | 1,619 | 1,651 | 1,684 | 1,718 | 1,752 |
| Lindula | 1,152 | 1,545 | 1,576 | 1,607 | 1,639 | 1,672 |
| **Total** | **1,205** | **1,545** | **1,576** | **1,608** | **1,640** | **1,673** |
| *YoY Growth* | | *28.3%* | *2.0%* | *2.0%* | *2.0%* | *2.0%* |

**Own Crop Production**

Based on the forecasted YPH, the Own Crop production for HPL would be as follows.

| Own Crop Production (Metric Tonnes) | FY2017 | FY2018F | FY2019F | FY2020F | FY2021F | FY2022F |
|---|---|---|---|---|---|---|
| Watawala | 1,097 | 1,235 | 1,260 | 1,285 | 1,311 | 1,337 |
| Hatton | 1,705 | 2,255 | 2,300 | 2,346 | 2,393 | 2,441 |
| Lindula | 1,809 | 2,425 | 2,474 | 2,523 | 2,574 | 2,625 |
| **Total** | **4,611** | **5,915** | **6,033** | **6,154** | **6,277** | **6,403** |

**Production from Bought Crop ("BC")**

HPL manufactures Tea from green leaves bought from third party suppliers apart from its Own Crop. The historical mix of Bought Crop to Total Crop production has been fairly consistent for the last fifteen years. However, NDBIB observed a gradual drop in the Bought Crop to Total Crop ratio from 39% in FY2014 to around 33% in first four months of FY2018F following the implementation of its "quality driven" strategy. This could be asserted to the Company's policy of selectively purchasing good quality leaves from bought leaf suppliers.

NDBIB arrived at the quantity of Bought Crop production through a forecasted Bought Crop to Total Crop ratio. The management has indicated that the probability of further reducing the proportion of Bought Crop production is low since there would be a consistent supply of quality green leaves if the factor affecting the green leaf production i.e. weather, supply of labour etc. remain unchanged. Further, the factors affecting third-party planters would have a similar impact on HPL's Own Crop. Additionally, the Company would have a significant idle capacity if the Bought Crop production is further reduced.  Therefore, the Bought Crop to Total Crop ratio for the forecast period was assumed to be same as the Bought Crop to Total Crop ratio during first four months of FY2018F.

| | FY2017 | FY2018F | FY2019F | FY2020F | FY2021F | FY2022F |
|---|---|---|---|---|---|---|
| **BC to Total Production Mix** | | | | | | |
| Watawala | 42.0% | 42.0% | 42.0% | 42.0% | 42.0% | 42.0% |
| Hatton | 50.7% | 46.0% | 46.0% | 46.0% | 46.0% | 46.0% |
| Lindula | 1.4% | 1.4% | 1.4% | 1.4% | 1.4% | 1.4% |
| **Total** | **35.8%** | **32.5%** | **32.5%** | **32.5%** | **32.5%** | **32.5%** |
| | | | | | | |
| **Quantity of Bought Crop (MT)** | | | | | | |
| Watawala | 796 | 896 | 914 | 932 | 951 | 970 |
| Hatton | 1,755 | 1,921 | 1,959 | 1,998 | 2,038 | 2,079 |
| Lindula | 25 | 34 | 35 | 35 | 36 | 37 |
| **Total** | **2,576** | **2,850** | **2,907** | **2,966** | **3,025** | **3,085** |

**Total Tea Production**

The Total Tea Production was arrived by adding the Own Crop Production and Bought Crop Production.

| Total Tea Production (MT) | FY2017 | FY2018F | FY2019F | FY2020F | FY2021F | FY2022F |
|---|---|---|---|---|---|---|
| Watawala | 1,893 | 2,131 | 2,173 | 2,217 | 2,261 | 2,306 |
| Hatton | 3,459 | 4,175 | 4,259 | 4,344 | 4,431 | 4,520 |
| Lindula | 1,834 | 2,459 | 2,509 | 2,559 | 2,610 | 2,662 |
| **Total** | **7,187** | **8,765** | **8,941** | **9,120** | **9,302** | **9,488** |

### 4.1.2. Net Sales Average ("NSA")

HPL sells more than 90% of its produce through the Colombo Tea Auction. Net Sales Average represents the average sale price obtained (over a period of time) after deducting selling costs e.g. brokerage fees. The auction prices would depend on the demand and supply prevailing for each category of tea at a given time.

The Colombo Tea Auction fetches the best price compared to its global peers given the high quality in the Sri Lankan produce. The average price in Colombo Tea Auction was USD 4.04 per kg during the 1Q2017 cf. the global average of USD 2.77.

| Auction Centres | 1Q2017 | | 2016 | | 2015 | |
|---|---|---|---|---|---|---|
| | Qty. (MT) | USD/kg | Qty. (MT) | USD/kg | Qty. (MT) | USD/kg |
| **Colombo** | **75,469** | **4.04** | **277,059** | **3.22** | **315,058** | **2.99** |
| Mombasa | 93,841 | 2.82 | 400,924 | 2.29 | 359,385 | 2.73 |
| Cochin | 11,400 | 1.92 | 46,748 | 1.74 | 54,785 | 1.55 |
| Kolkata | 39,620 | 1.92 | 142,240 | 2.41 | 143,416 | 2.47 |
| Chittagong | 18,291 | 1.76 | 72,021 | 2.55 | 63,529 | 2.41 |
| Malawi | 3,242 | 1.75 | 8,747 | 1.55 | 8,412 | 1.56 |
| Guwahati | 33,809 | 1.68 | 138,649 | 2.05 | 145,428 | 2.16 |
| Jakarta | - | - | 27,003 | 1.62 | 20,118 | 1.56 |
| **World** | **275,672** | **2.77** | **1,113,391** | **2.48** | **1,110,131** | **2.59** |

*Source: Publication of Tea Promotion Division - Sri Lanka Tea Board*

NDBIB forecasted the NSA based on historical NSA trends and HPL's NSA position relative to the industry. The NSA achieved by HPL compared to the industry is as follows.

| NSA in LKR Terms | FY2011 | FY2012 | FY2013 | FY2014 | FY2015 | FY2016 | FY2017 |
|---|---|---|---|---|---|---|---|
| Watawala | 356.9 | 332.8 | 402.3 | 426.8 | 406.7 | 414.0 | 525.5 |
| Hatton | 349.3 | 320.5 | 397.5 | 411.7 | 386.5 | 401.2 | 509.9 |
| Lindula | 352.5 | 343.3 | 401.6 | 414.7 | 407.2 | 432.5 | 522.8 |
| **HPL Average** | **352.3** | **330.3** | **399.9** | **417.0** | **397.6** | **413.7** | **517.4** |
| **National High-Elevation Average** | 340.7 | 333.8 | 378.9 | 405.7 | 417.0 | 387.2 | 455.4 |
| **National Average** | 371.5 | 360.7 | 392.4 | 445.8 | 459.0 | 401.5 | 473.2 |

*Source: Company; Central Bank of Sri Lanka Annual Reports 2010 – 2016, Sri Lanka Tea Board – Tea Market Update 1Q 2017*

NDBIB analysed the NSA achieved by HPL for each region for the last fifteen years. The 10-yr NSA CAGR in LKR and USD terms for the periods ending FY2011 to FY2017 are as follows.

| 10-Year CAGR in LKR Terms | FY2011 | FY2012 | FY2013 | FY2014 | FY2015 | FY2016 | FY2017 |
|---|---|---|---|---|---|---|---|
| HPL Average | 10.1% | 9.5% | 11.7% | 11.0% | 8.2% | 8.6% | 8.7% |
| National High-Elevation Average | 10.2% | 9.4% | 10.8% | 11.4% | 9.3% | 8.5% | 8.3% |
| National Average | 10.6% | 9.6% | 10.2% | 11.6% | 9.8% | 8.0% | 9.1% |

*Source: Company; Central Bank of Sri Lanka Annual Reports 2010 – 2016, Sri Lanka Tea Board – Tea Market Update 1Q 2017*

| 10-Year CAGR in USD Terms | FY2011 | FY2012 | FY2013 | FY2014 | FY2015 | FY2016 | FY2017 |
|---|---|---|---|---|---|---|---|
| HPL Average | 6.3% | 7.3% | 8.4% | 7.8% | 5.5% | 5.2% | 5.1% |
| National High-Elevation Average | 6.4% | 7.2% | 7.6% | 8.1% | 6.5% | 5.2% | 4.8% |
| National Average | 6.8% | 7.4% | 6.9% | 8.3% | 7.0% | 4.7% | 5.5% |

*Source: Company; Central Bank of Sri Lanka Annual Reports 2010 – 2016, Sri Lanka Tea Board – Tea Market Update 1Q 2017*

The 10-year National High-Elevation NSA CAGR in LKR terms ranges from 8.3% to 11.4% while the 10-year NSA CAGR in USD terms ranges from 4.8% to 8.1% indicating an average USD/LKR depreciation of approximately 3.0% for the analysed period.

Based on the above observations, NDBIB forecasted the NSA to increase 5.0 % YoY in USD terms during the forecast period. The average USD/LKR depreciation was assumed to be 3.0% per annum. Hence, HPL is expected to experience a NSA growth of 8.2% YoY in LKR terms during the forecast period.

| Net Sales Average (LKR per kg) | FY2017 | FY2018F | FY2019F | FY2020F | FY2021F | FY2022F |
|---|---|---|---|---|---|---|
| Watawala | 525.5 | 572.7 | 619.4 | 669.9 | 724.5 | 783.5 |
| Hatton | 509.9 | 537.0 | 580.8 | 628.1 | 679.3 | 734.7 |
| Lindula | 522.8 | 547.3 | 591.9 | 640.2 | 692.3 | 748.8 |
| **Total** | **517.3** | **548.6** | **593.3** | **641.7** | **693.9** | **750.5** |
| *YoY Growth* | | *6.1%* | *8.2%* | *8.2%* | *8.2%* | *8.2%* |

### 4.1.3. Total Tea Revenue

Based on the aforementioned assumptions, NDBIB arrived at the following forecast Tea Revenue for HPL.

| Tea Revenue (LKR Mn) | FY2017 | FY2018F | FY2019F | FY2020F | FY2021F | FY2022F |
|---|---|---|---|---|---|---|
| Watawala | 994.7 | 1,220.4 | 1,346.2 | 1,485.1 | 1,638.2 | 1,807.2 |
| Hatton | 1,763.9 | 2,242.2 | 2,473.5 | 2,728.6 | 3,010.0 | 3,320.4 |
| Lindula | 958.9 | 1,346.0 | 1,484.9 | 1,638.0 | 1,806.9 | 1,993.3 |
| **Total** | **3,717.4** | **4,808.7** | **5,304.6** | **5,851.6** | **6,455.1** | **7,120.8** |
| | | | | | | |
| ***YoY Growth*** | | | | | | |
| *Watawala* | *-3.5%* | *22.7%* | *10.3%* | *10.3%* | *10.3%* | *10.3%* |
| *Hatton* | *2.3%* | *27.1%* | *10.3%* | *10.3%* | *10.3%* | *10.3%* |
| *Lindula* | *-4.6%* | *40.4%* | *10.3%* | *10.3%* | *10.3%* | *10.3%* |

### 4.1.4. Revenue from Reprocessed Tea

HPL produces Reprocessed Tea from the crop produced in its estates. NDBIB forecasted the reprocessed tea sales volume based on YoY growth rates. The growth rates for the quantity sold in FY2018F was based on the growth in quantities sold for the first four months of FY2018F. The growth rates for the rest of the forecast period was based on the growth in Own Crop production in the corresponding years.

The average sales price for reprocessed tea was forecasted based the same assumptions made on NSA for Tea. The total Reprocessed Tea revenue based on the above assumptions is as follows.

| Revenue from Reprocessed Tea (LKR Mn) | FY2017 | FY2018F | FY2019F | FY2020F | FY2021F | FY2022F |
|---|---|---|---|---|---|---|
| Reprocessed Tea Revenue | 129.0 | 185.6 | 204.7 | 225.8 | 249.1 | 274.8 |
| *YoY Increase (%)* | | *43.9%* | *10.3%* | *10.3%* | *10.3%* | *10.3%* |

### 4.1.5. Total Revenue

The forecast total revenue resulting from the aforementioned assumptions is as follows.

| Total Revenue (LKR Mn) | FY2017 | FY2018F | FY2019F | FY2020F | FY2021F | FY2022F |
|---|---|---|---|---|---|---|
| Revenue from Own Crop Production | 2,391.2 | 3,245.6 | 3,580.3 | 3,949.6 | 4,356.9 | 4,806.2 |
| Revenue from Bought Crop | 1,326.1 | 1,563.1 | 1,724.3 | 1,902.1 | 2,098.2 | 2,314.6 |
| Revenue from Reprocessed Tea | 129.0 | 185.6 | 204.7 | 225.8 | 249.1 | 274.8 |
| **Total Revenue** | **3,770.7*** | **4,994.2** | **5,509.3** | **6,077.5** | **6,704.2** | **7,395.7** |
| *YoY Growth* | | *32.4%* | *10.3%* | *10.3%* | *10.3%* | *10.3%* |

**Net of Stock Adjustments*

#### 4.1.6. Non-Operating Income

The vested Upcountry Tea Business Segment has assets which generate income from sources other than cultivation and manufacturing tea. These non-operating income streams include but not limited to the following.

1. Lease rent from the hydro power plant in Waltrim
2. Investment Income from the investment fund
3. Fair Value gains/losses from Consumable Biological Assets
4. Amortization of capital grants
5. Tower rental Income
6. Sale of scrap and other items
7. Bungalow rentals
8. Dividend from Available for Sale Investments
9. Income from other crops
10. Sale of fixed assets
11. Sale of trees and other assets

The total non-operating income has not exceeded more than 3.5% of total revenue during the past five years and some of the income streams are non-recurring. NDBIB has categorised non-operating income based on their materiality and recurrence. The material income streams were analysed individually and were forecasted based on the following bases and assumptions.

| Income Stream | Forecasting Basis | Assumption |
|---|---|---|
| Gain on Investment Fund - Upcountry | *Annual Return* | *10.0%* |
| Fair Value Gain/(loss) on Consumables | *Annual Appreciation of Consumables* | *2.2%* |
| Lease Rent - Hydro Power | *YoY Growth* | *3.0%* |
| Amortisation of Capital Grant | *Amortised over the remaining Useful Life* | *19 years* |

Non-material and non-recurring income streams were grouped and analysed together. After evaluating their historical trends, NDBIB forecasted these income streams by applying a 3.0% YoY growth rate.

| | FY2017 | FY2018F | FY2019F | FY2020F | FY2021F | FY2022F |
|---|---|---|---|---|---|---|
| Total Non-Operating Income (LKR Mn) | 130.4 | 130.1 | 135.0 | 140.2 | 145.6 | 151.5 |
| *Total Non-Operating Income as a % of Revenue* | *3.5%* | *2.6%* | *2.4%* | *2.3%* | *2.2%* | *2.0%* |

### 4.2. Cost Assumptions

#### 4.2.1. Cost of Sales

Cost of Sales includes costs relating to Own Crop, Bought Crop, and Reprocessed Tea. The Cost of Own Crop Production includes cultivation, plucking, manufacturing, and other production overheads costs while the cost of Bought Crop includes the cost of bought leaves, manufacturing and other production overheads. The costs of Reprocessed Tea mainly include the manufacturing costs associated with reprocessing.

HPL has the production capacity to produce tea under both Orthodox and CTC (Cut, Tear, Curl) methods. Approximately 60% of HPL production is through Orthodox methods and the other 40% is through CTC.

| Factory Capacity | % |
|---|---|
| Orthodox/Rotovane | 50.0 |
| Orthodox/Leafy | 10.0 |
| CTC | 40.0 |

The labour cost consists of approximately 70% of the Cost of Production and hence it is the main driver of Cost of Production. The majority of HPL staff is under collective agreements and employee remunerations are negotiated once in every two years.

NDBIB forecasted Cost of Sales based on the Cost of Production per kilo of produce (“COP”). COP was forecasted based on YoY growth rates. The forecasted COP was multiplied by the quantity produce to arrive at the total production cost. Thereafter the production cost was adjusted for opening and closing inventory to arrive at the Cost of Sales.

**COP for Own Crop**

COP for FY2018F was assumed to be as same as the COP for the first four months of FY2018F. Beyond FY2018F, the COP for Own Crop was forecast based on a YoY growth rate of 12.9% in every two years starting from FY2019F and in between years were forecasted based on a YoY growth rate of 5.7%. NDBIB arrived at 5.7% annual growth rate based on its expected inflation rate for the forecast period. NDBIB expects the inflation during the forecast period would be similar to the annual average Core inflation, based on National Consumer Price Index (NCPI), from 2014 to September 2017. In financial years where the industry increases minimum wage rates, NDBIB expects the labour costs to increase by 16% while rest of the cost to increase by the expected inflation rate i.e. 5.7%. Assuming the labour costs to other costs ratio is 70:30, the weighted average growth rate amounts to 12.9%.

| COP for Own Crop Production | FY2017 | FY2018F | FY2019F | FY2020F | FY2021F | FY2022F |
|---|---|---|---|---|---|---|
| Cost of Production per kg (LKR) | 577.1 | 517.1 | 583.8 | 617.0 | 696.6 | 736.1 |
| *YoY Increase (%)* | | *-10.4%* | *12.9%* | *5.7%* | *12.9%* | *5.7%* |
| Total Cost of Production (LKR Mn) | 2,660.9 | 3,058.8 | 3,522.5 | 3,796.9 | 4,372.5 | 4,713.1 |
| *YoY Growth (%)* | | *15.0%* | *15.2%* | *7.8%* | *15.2%* | *7.8%* |

**COP for Bought Crop**

Similar to Own Crop, the COP for Bought Crop for FY2018F was assumed to be as same as the Bought Crop COP for the first four months of FY2018F. Since the cost of purchasing bought leaves are strongly correlated with auction prices, NDBIB assumed the YoY growth rate for Bought Crop COP to be as same as YoY NSA growth rate beyond FY2018F i.e. 8.2%.

| COP for Bought Crop | FY2017 | FY2018F | FY2019F | FY2020F | FY2021F | FY2022F |
|---|---|---|---|---|---|---|
| Cost of Production per kg (LKR) | 420.4 | 480.8 | 520.0 | 562.4 | 608.2 | 657.8 |
| *YoY Increase (%)* | | *14.4%* | *8.2%* | *8.1%* | *8.2%* | *8.2%* |
| Total Cost of Production (LKR Mn) | 1,083.0 | 1,370.4 | 1,511.8 | 1,667.7 | 1,839.7 | 2,029.4 |
| *YoY Growth (%)* | | *26.5%* | *10.3%* | *10.3%* | *10.3%* | *10.3%* |

**COP for Reprocessed Tea**

The forecast assumptions for Reprocessed Tea COP were as same as the Own Crop COP. The COP for first four months of FY2018F is expected to remain same for the rest of the year. Thereafter, Reprocessed Tea COP is expected to grow at the same rate as Own Crop COP.

| COP for Reprocessed Tea | FY2017 | FY2018F | FY2019F | FY2020F | FY2021F | FY2022F |
|---|---|---|---|---|---|---|
| Total Cost of Production (LKR Mn) | 35.9 | 32.7 | 37.6 | 40.6 | 46.7 | 50.4 |
| *YoY Growth (%)* | | *-9.0%* | *15.2%* | *7.8%* | *15.2%* | *7.8%* |

The forecast Cost of Production was arrived by adding Cost of Production for Own Crop, Bought Crop and Reprocessed Tea. This was adjusted for Opening and Closing Stocks to arrive at the Cost of Sales.

#### 4.2.2. Administrative Expenses

Administrative Expenses of HPL mainly consists of Utilities, Rent, Head Office Staff Expenses and other General Administration Overheads. NDBIB assumed the Administrative Expenses to grow annually at the expected inflation rate i.e. 5.7%, over the forecast period.

| Administrative Expenses | FY2017 | FY2018F | FY2019F | FY2020F | FY2021F | FY2022F |
|---|---|---|---|---|---|---|
| Administrative Expenses (LKR Mn) | 151.6 | 164.6 | 169.3 | 178.9 | 189.1 | 199.8 |
| *YoY Increase (%)* | | *8.6%* | *5.7%* | *5.7%* | *5.7%* | *5.7%* |

#### 4.2.3. Finance Cost/Income

HPL's current long-term borrowings are at a floating interest rate of AWPLR + 0.5%. NDBIB assumed HPL would be able to borrow at the same interest rates for future long-term projects. Further, NDBIB assumed market interest rates to remain constant throughout the forecast period.

The average interest rate for the Finance Lease Obligations to SLSPC and JEDB was 4.1% during last 5 years. NDBIB maintained the same average interest rate during the forecast period.

NDBIB assumed the Company would invest its excess cash and cash equivalents in short to immediate term investments. The average finance income from such investments were assumed to be 5.0% during the forecast period.

#### 4.2.4. Taxation

The applicable income tax rates for HPL would differ based on the source of statutory income. HPL is liable for income tax at a rate of 28% for its statutory income generated from manufacturing while the applicable income tax rate for cultivation is just 10%. However, the applicable income tax rate for cultivation was increased to 14% from FY2019F onwards under the new Inland Revenue Act. Non-operating Income and Financial Income are taxed at 28%.

Historically the split of statutory income between cultivation and manufacturing has been 68% and 32% respectively. NDBIB assumed the historical split to continue during the forecast period.

| Taxation (LKR Mn) | FY2018F | FY2019F | FY2020F | FY2021F | FY2022F |
|---|---|---|---|---|---|
| Income Tax Liability from Primary Income | 69.2 | 51.2 | 75.7 | 53.0 | 79.8 |
| Income Tax for Other Income | 31.8 | 35.5 | 38.1 | 40.9 | 44.1 |
| Total Income Tax Liability | 101.0 | 86.7 | 113.8 | 93.9 | 123.9 |
| *Effective Tax Rate for Primary Income* | *15.8%* | *18.5%* | *18.5%* | *18.5%* | *18.5%* |
| *Effective Tax Rate for Total Income* | *17.5%* | *20.3%* | *20.0%* | *20.5%* | *20.2%* |

### 4.3. Balance Sheet Assumptions

#### 4.3.1. Capital Expenditure

The Company would incur capital expenditure to upkeep the bearer plants and factory facilities. The Capital Expenses to Sales ratio for Upcountry Tea Business Segment ranged around 2.9% to 6.4% during the past five years. Considering the future business plans of the Company, NDBIB expects the Capital expenses to Sales ratio of HPL to remain around 3.0% of total Revenue.

| Forecast Capex-to-Sales Ratio | % |
|---|---|
| Property Plant and Equipment | 1.0% |
| Bearer Plants | 2.0% |

### 4.3.2. Working Capital

**Inventory**

NDBIB has arrived at the finished goods inventory by multiplying the forecast unsold inventory by the forecast average NSA for the respective year. The unsold inventory was forecasted by analysing the historical unsold inventory quantity compared to the total production in each year. The average NSA was derived by taking the average of NSA figures at the beginning and at the end of the year. Raw material and other inventory were forecasted as a percentage of Cost of Sales.

| Inventory Assumptions | Forecasting Basis | Assumption |
|---|---|---|
| Qty. of Unsold Tea | *as a % of Qty. of Tea Production* | *8.4%* |
| Qty. of Unsold Reprocessed Tea | *as a % of Qty. of Reprocessed Tea Production* | *17.0%* |
| Qty. of Unsold BMF | *as a % of Qty. of BMF Production* | *25.0%* |
| Raw Material and Other Inventory | *as a % of Cost of Sales* | *2.3%* |

The resultant Inventory days for HPL for the forecast period was approximately 38 to 39 days.

| Inventory (LKR Mn) | FY2017 | FY2018F | FY2019F | FY2020F | FY2021F | FY2022F |
|---|---|---|---|---|---|---|
| Tea | 387.5 | 392.4 | 428.8 | 473.0 | 521.8 | 575.6 |
| Reprocessed Tea | 7.2 | 24.3 | 27.5 | 30.4 | 33.5 | 37.0 |
| BMF | 5.2 | 8.1 | 8.7 | 9.6 | 10.6 | 11.7 |
| Raw Material/Other Inventory | 87.0 | 95.9 | 110.6 | 120.0 | 136.5 | 148.2 |
| **Total Inventory** | **486.8** | **520.7** | **575.7** | **633.1** | **702.4** | **772.5** |
| *Inventory Days (days)* | *47* | *38* | *38* | *38* | *38* | *38* |

**Trade Receivable and Trade Payables**

Trade Receivables and Trade Payables were forecasted based on Historical Trade Receivables and Trade Payables days. More than 90% of HPL's produce is sold at the Colombo Tea Auction and the receivables at the Tea Auction are generally settled within 7 days. This is further evident from the Trade Receivable days for the past five years which ranged between 5 to 7 days. The historical trade payable days for the last five years range between 10 to 19 days.

The following assumptions were used to forecast Trade Receivables and Trade Payables of HPL.

| | Assumption |
|---|---|
| Receivable Days | 6 |
| Payable Days | 13 |

### 4.3.3. Borrowings and the Future Capital Structure

HPL's Debt to Equity ratio was 16.7% as at September 30, 2017 and its current commercial borrowings would get fully repaid by FY2021F. The management of HPL, however, indicated that they intend to partially fund the future capital expenditure by long term debt. The Company further intends to maintain its long run capital structure with a mixture of Debt and Equity where Debt to Equity ratio would be maintained just below 30%.

Accordingly, NDBIB increased the net debt raising for HPL gradually during the forecast period to maintain a debt-to-equity ratio of 25%-30%.

| LKR Mn | FY2017 | FY2018F | FY2019F | FY2020F | FY2021F | FY2022F |
|---|---|---|---|---|---|---|
| Total Debt | 275.8 | 587.4 | 611.2 | 634.8 | 683.8 | 779.1 |
| Total Equity | 1,845.9 | 2,083.4 | 2,254.0 | 2,482.1 | 2,663.9 | 2,909.0 |
| *Debt Ratio (%)* | *13.0%* | *22.0%* | *21.3%* | *20.4%* | *20.4%* | *21.1%* |
| *Debt to Equity Ratio (%)* | *14.9%* | *28.2%* | *27.1%* | *25.6%* | *25.7%* | *26.8%* |

#### 4.3.4. Dividend Policy

The average dividend pay-out ratio for Watawala Plantations PLC was approximately 33.0% for the last five years. NDBIB believes HPL could maintain a dividend pay-out ratio of approximately 50% during the forecast period.

#### 4.3.5. Depreciation and Amortization Rates

NDBIB made the following assumption on Depreciation and Amortization rates.

| | Assumption |
|---|---|
| Average Useful Life of Bearer Plants | *30 years* |
| Average Useful Life of PP&E | *12 years* |
| Annual Amortisation of Leasehold Land | *1.9%* |
| Annual Amortisation of Immovable Estate Assets | *3.2%* |

The Depreciation Charge for PP&E was attributed to both Cost of Production and Administrative Expenses at a ratio of 85% to 15% during the past five years. NDBIB assumed the proportions to continue during the forecast period.

#### 4.3.6. Other Balance Sheet Assumptions

The Other Balance Sheet items were forecasted based on the Company's accounting policies and disclosures in the WATA Annual Reports.

## 5.0 FORECAST FINANCIAL STATEMENTS

### 5.1. Forecast Income Statement

| LKR Mn | FY2017 | FY2018F | FY2019F | FY2020F | FY2021F | FY2022F |
|---|---|---|---|---|---|---|
| Revenue | 3,770.7 | 4,994.2 | 5,509.3 | 6,077.5 | 6,704.2 | 7,395.7 |
| Cost of Sales* | (3,329.2) | (4,225.8) | (4,875.4) | (5,288.3) | (6,012.7) | (6,528.8) |
| **Gross Profit** | **441.5** | **768.5** | **633.9** | **789.2** | **691.6** | **866.9** |
| Administrative Expenses | (151.6) | (160.2) | (169.3) | (178.9) | (189.1) | (199.8) |
| **EBITDA** | **289.9** | **608.2** | **464.6** | **610.3** | **502.5** | **667.0** |
| Depreciation & Amortisation | (121.5) | (124.2) | (132.1) | (140.8) | (150.4) | (160.9) |
| **EBIT** | **168.4** | **484.0** | **332.5** | **469.5** | **352.1** | **506.1** |
| Non-Operating Income | 130.4 | 130.1 | 135.0 | 140.2 | 145.6 | 151.5 |
| Finance Cost | (51.2) | (44.9) | (55.5) | (59.9) | (65.2) | (74.4) |
| Finance Income | | 7.0 | 15.7 | 20.3 | 24.9 | 30.9 |
| **Profit Before Tax** | **247.6** | **576.1** | **427.7** | **570.1** | **457.5** | **614.0** |
| Income Tax | (88.7) | (101.0) | (86.7) | (113.8) | (93.9) | (123.9) |
| **Profit After Tax** | **158.9** | **475.2** | **341.0** | **456.3** | **363.6** | **490.2** |

***** *The Depreciation and Amortisation included in Cost of Sales have been removed to present EBITDA separately.*

**5.2. Forecast Statement of Financial Position**

| LKR Mn | FY2017 | FY2018F | FY2019F | FY2020F | FY2021F | FY2022F |
|---|---|---|---|---|---|---|
| **ASSETS** | | | | | | |
| **Non-Current Assets** | | | | | | |
| Property, Plant and Equipment | 1,101.2 | 1,057.3 | 1,014.1 | 971.9 | 930.5 | 890.2 |
| Total Biological Assets | 1,343.0 | 1,430.3 | 1,524.7 | 1,626.9 | 1,737.7 | 1,858.0 |
| Other Non-Current Assets | 399.9 | 195.1 | 191.0 | 186.8 | 182.6 | 178.4 |
| **Total Non-Current Assets** | **2,844.0** | **2,682.7** | **2,729.8** | **2,785.5** | **2,850.8** | **2,926.6** |
| | | | | | | |
| **Current Assets** | | | | | | |
| Inventories | 486.8 | 520.7 | 575.7 | 633.1 | 702.4 | 772.5 |
| Trade and Other Receivables | 248.4 | 256.1 | 264.6 | 273.9 | 284.2 | 295.6 |
| Investment Fund* | - | 220.6 | 242.7 | 266.9 | 293.6 | 323.0 |
| Bearer Plants | 16.6 | 16.6 | 16.6 | 16.6 | 16.6 | 16.6 |
| Cash and Cash Equivalents | 1.7 | 276.7 | 351.4 | 461.1 | 536.0 | 698.2 |
| **Total Current Assets** | **753.5** | **1,290.7** | **1,451.0** | **1,651.6** | **1,832.9** | **2,105.8** |
| | | | | | | |
| **TOTAL ASSETS** | **3,597.5** | **3,973.4** | **4,180.8** | **4,437.2** | **4,683.7** | **5,032.4** |
| **LIABILITIES & EQUITY** | | | | | | |
| **EQUITY** | | | | | | |
| Stated Capital | | 1,803.4 | 1,803.4 | 1,803.4 | 1,803.4 | 1,803.4 |
| Reserve on Rearrangement | | 52.8 | 52.8 | 52.8 | 52.8 | 52.8 |
| Retained Earnings | | 227.2 | 397.8 | 625.9 | 807.7 | 1,052.8 |
| **Total Equity** | **1,845.9** | **2,083.4** | **2,254.0** | **2,482.1** | **2,663.9** | **2,909.0** |
| | | | | | | |
| **Non-Current Liabilities** | | | | | | |
| Long Term Borrowings | 190.5 | 218.5 | 246.5 | 300.0 | 400.0 | 500.0 |
| Other Non-Current Liabilities | 1,075.7 | 1,061.5 | 1,047.1 | 1,032.5 | 1,017.8 | 1,002.8 |
| **Total Non-Current Liabilities** | **1,266.2** | **1,280.0** | **1,293.6** | **1,332.5** | **1,417.8** | **1,502.8** |
| | | | | | | |
| **Current Liabilities** | | | | | | |
| Current Portion of Long Term Borrowings | 85.3 | 172.0 | 172.0 | 146.5 | 100.0 | 100.0 |
| Trade and Other Payables | 396.0 | 433.7 | 456.9 | 471.6 | 497.4 | 515.7 |
| Other Current Liabilities | 4.0 | 4.2 | 4.4 | 4.5 | 4.7 | 4.9 |
| **Total Liabilities** | **485.4** | **609.9** | **633.2** | **622.5** | **602.1** | **620.7** |
| | | | | | | |
| **TOTAL LIABILITIES & EQUITY** | **3,597.5** | **3,973.4** | **4,180.8** | **4,437.2** | **4,683.7** | **5,032.4** |

**The Investment Fund was under Other Non-Current Assets up until FY2017 and it was reclassified as a Current Asset on September 30, 2017*

### 5.3. Forecast Cash Flow Statement

| LKR Mn | FY2018F | FY2019F | FY2020F | FY2021F | FY2022F |
|---|---|---|---|---|---|
| **Cash Flow From Operating Activities** | | | | | |
| **Net Profit/(Loss) Before Taxation** | 576.1 | 427.7 | 570.1 | 457.5 | 614.0 |
| Adjustments for Non-Cash Items | 118.5 | 125.8 | 131.8 | 139.4 | 150.2 |
| Cash Flow Before Changes in Working Capital Assets | 694.6 | 553.5 | 701.9 | 596.9 | 764.3 |
| Adjustments for Changes in Working Capital | (3.9) | (40.4) | (52.0) | (53.9) | (63.1) |
| Cash Generated from/(Used in) Operations | 690.7 | 513.2 | 649.9 | 543.0 | 701.2 |
| Tax Paid | (101.0) | (86.7) | (113.8) | (93.9) | (123.9) |
| **Net Cash Flows From/(Used in) Operating Activities** | **589.7** | **426.5** | **536.1** | **449.1** | **577.3** |
| | | | | | |
| **Cash Flows From/(Used in) Investing Activities** | | | | | |
| Capital Expenditure | (149.8) | (165.3) | (182.3) | (201.1) | (221.9) |
| Finance Income | 7.0 | 15.7 | 20.3 | 24.9 | 30.9 |
| **Net Cash Flows from/(Used in) Investing Activities** | **(142.9)** | **(149.6)** | **(162.0)** | **(176.2)** | **(191.0)** |
| | | | | | |
| **Cash Flows From/(Used in) Financing Activities** | | | | | |
| Dividend Paid | (237.6) | (170.5) | (228.1) | (181.8) | (245.1) |
| Net Borrowings | 114.7 | 28.0 | 28.0 | 53.6 | 100.0 |
| Repayment of Lease Principal | (4.0) | (4.2) | (4.4) | (4.5) | (4.7) |
| Interest Expenses Paid | (44.9) | (55.5) | (59.9) | (65.2) | (74.4) |
| **Net Cash Flows from/(Used in) Financing Activities** | **(171.9)** | **(202.2)** | **(264.4)** | **(198.0)** | **(224.2)** |
| | | | | | |
| **Net Change in Cash & Cash Equivalents** | **275.0** | **74.7** | **109.7** | **74.9** | **162.1** |
| Cash & Cash Equivalents at the Beginning of the Year | 1.7 | 276.7 | 351.4 | 461.1 | 536.0 |
| **Cash & Cash Equivalents at the End of the Year** | **276.7** | **351.4** | **461.1** | **536.0** | **698.2** |

## 6.0 VALUATION METHODOLOGY

Some of the most commonly used techniques amongst the many different methodologies used in valuing companies are given below:

- Discounted Free Cash Flow (DCF) Method
- Net Asset Value Method
- Relative Valuation Method
- Residual Income Method

Considering HPL's business model and the industry in which it operates, NDBIB believes not all valuation methodologies could be considered as appropriate. In order to determine the reference price of the shares of HPL the following techniques have been used:

- Net Asset Value Method
- Discounted Cash Flow Method
- Relative Valuation Method

### 6.1. Net Asset Value Method

The Net Asset Value (NAV) per share can be calculated as follows:

$$\textbf{NAV per share} = \frac{(\textbf{Market Value of Total Assets} - \textbf{Market Value of Total Liabilities})}{\textbf{Number of Shares in Issue}}$$

- The NAV method of calculating the value of a company is based on both the stated and the contingent assets and liabilities of a company.
- Under this method, the book value of the company is considered as a proxy for NAV.

### 6.2. Discounted Cash Flow (DCF) Method

The theoretical framework of applying the Discounted Cash Flow (DCF) method of valuation can be summarised as follows:

- The business value attributable to the capital providers of the company consists of the present value of Free Cash Flows distributable to the providers of capital of the company.
- The strategic value of the company could be ascertained by considering the business value attributable to the capital providers adjusting for any non-operational assets/liabilities.
- In the DCF approach, the following formula is used to determine the business value attributable to the capital providers:

$$\mathbf{V_0} = \left[\sum_{t=1}^{n} \frac{\mathbf{FCFE}_t}{(\mathbf{1} + \mathbf{K_e})^{\mathbf{t}}}\right] + \mathbf{TV_0}$$

Where:

$V_0$ = *Intrinsic value in year 0*
$FCFE_t$ = *Free Cash Flow to Equity in year t*
$K_e$ = *Cost of Equity*
$TV_0$ = *Present value of terminal value at year 0*

The FCFE is defined as

- Earnings Before Interest and Tax (EBIT)
- Add/(Less): Adjustments for items not involving any cash movements
- Less: Taxes
- Add/(Less): Decrease/(Increase) in working capital
- Less: Capital expenditure
- Add/(Less): Net borrowings
- (Less): Debt servicing costs

Further, the Gordon Growth Model (GGM) was used to derive $TV_0$ with the following formula

$$\mathbf{TV_0} = \frac{\mathbf{FCFE_n\,(1+g)}}{\mathbf{(K_e - g)(1+K_e)^n}}$$

Where:

$g$ = *Terminal growth rate*
$FCFE_n$ = *Free Cash Flow to Equity in year n*

### 6.3. Relative Valuation Method

HPL can be valued based on the price multiples of its listed peers. The commonly used price multiples to calculate relative value of a share are Price to Earnings (P/E), Enterprise Value to EBITDA (EV/EBITDA) and Price to Book value (P/BV) ratios.

#### 6.3.1. P/E

The relative value for HPL shares using peer Price to Earnings ratio would be calculated as follows:

$$\mathbf{Market\ Price} = \mathbf{EPS * Applicable\ P/E}$$

Where:

$EPS$ = *Earnings Per Share*
$P/E$ = *Price to Earnings Ratio*

#### 6.3.2. EV/EBITDA

EV/EBITDA Multiple is a commonly accepted relative valuation multiple to analyse companies with significant real assets. Further, EV/EBITDA eliminates the impact of capital structure differences among peer companies and thereby provides a better price multiple to evaluate a peer group with different financial strategies.

The Enterprise Value of HPL shares using peer Enterprise Value to EBITDA ratio would be calculated as follows:

$$\mathbf{Enterprise\ Value = EBITDA * Applicable\ EV/EBITDA\ multiple}$$

Where:

$EBITDA$ = Earnings before Interest, Tax, Depreciation and Amortization
$EV$= Enterprise Value

After arriving at the EV, the market value of equity shares can be derived by deducting Net Debt and adding non-operating assets to the EV.

$$\mathbf{Market\ Value\ of\ Equity = EV - Net\ Debt + Non\ operating\ Assets}$$

Where:

$$\mathbf{Net\ Debt = Interest\ Bearing\ Debt - Cash\ \&\ Cash\ Equivalents}$$

The market price per share can be derived by dividing the Market Value of Equity by the number of outstanding equity shares.

$$\mathbf{Market\ Price} = \frac{\mathbf{Market\ Value\ of\ Equity}}{\mathbf{Number\ of\ Equity\ Shares}}$$

### 6.3.3. P/BV

The relative value for HPL shares using peer average Price to Book Value ratio would be calculated as follows:

$$\textbf{Market Price} = \textbf{BVPS} * \textbf{Applicable P/BV}$$

Where:

$BVPS$ = *Book Value Per Share*
$P/BV$ = *Price to Book Value ratio*

## 7.0 VALUATION RESULTS

The following section illustrates key valuation assumptions and the resultant equity valuations as at September 30, 2017 for the Company based on the three methods discussed in this Research Report.

### 7.1. Net Asset Value Method

| | |
|---|---|
| Net Asset Value as at September 30, 2017 (LKR Mn) | **1,856.2** |
| Number of Shares in Issue (Mn) | **236.7** |
| Net Assets Value per Share (LKR) | **7.84** |

Based on the Net Asset Value Approach, the total Equity Value of HPL amounts to
**LKR 1.86 Bn with a per share value of LKR 7.84**

### 7.2. Discounted Cash Flow Method

#### 7.2.1. Cost of Capital

The following key assumptions were used in arriving at the Cost of Equity used in the DCF Valuation of HPL.

| DCF Assumptions | |
|---|---|
| 10yr Government Bond Rate† | 10.3% |
| Corporate Bond Premium‡ | 1.9% |
| Equity Risk Premium | 6.5% |
| **Cost of Equity** | **18.7%** |
| Terminal Growth Rate | 2.0% |

*†Source: Central Bank of Sri Lanka as at September 29, 2017*

*‡Corporate Bond premium indicates the difference between the Company's long term borrowing rate and the Risk-free Rate.*

#### 7.2.2. Free Cash Flow to Equity

The forecast Free Cash Flow to Equity with the above assumptions is as follows.

| Free Cash Flow to Equity | FY2018F* | FY2019F | FY2020F | FY2021F | FY2022F |
|---|---|---|---|---|---|
| **Net Profit/(Loss) Before Taxation** | **288.1** | **427.7** | **570.1** | **457.5** | **614.0** |
| Adjustments for Non-Cash items | 59.2 | 125.8 | 131.8 | 139.4 | 150.2 |
| Change in Net Working Capital | (3.9) | (40.4) | (52.0) | (53.9) | (63.1) |
| Tax Paid on Operating Activities | (84.6) | (76.1) | (101.4) | (79.4) | (107.0) |
| **Net Cash Flows From/(Used in) Operating Activities** | **258.8** | **437.0** | **548.6** | **463.6** | **594.2** |
| Capital Expenditure | (74.9) | (165.3) | (182.3) | (201.1) | (221.9) |
| Withholding Tax on Dividend | (16.6) | (23.9) | (31.9) | (25.4) | (34.3) |
| **Free Cash Flow to Firm** | **167.2** | **247.9** | **334.3** | **237.0** | **338.0** |
| Net Borrowings | 57.3 | 28.0 | 28.0 | 53.6 | 100.0 |
| Repayment of Lease Principal | (2.0) | (4.2) | (4.4) | (4.5) | (4.7) |
| Interest Expenses Paid | (22.5) | (55.5) | (59.9) | (65.2) | (74.4) |
| **Free Cash Flow to Equity** | **200.1** | **216.2** | **298.1** | **220.8** | **358.9** |

**The Free Cash Flow to Equity for the six months' period from October 01, 2017 to March 31, 2018.*

| Equity Value as per DCF Method | |
|---|---|
| **Present Value of FCFE** | **832.6** |
| **PV of Terminal Value** | **828.6** |
| **Equity Value** | **1,661.3** |
| Number of Shares in Issue | **236.7** |
| **Equity Value per Share** | **7.02** |

Based on the Discounted Free Cash Flow Approach, the total equity value of HPL amounts to
**LKR 1.66 Bn with a per share value of LKR 7.02**

### 7.3. Relative Valuation Method

NDBIB carried out a relative value analysis on listed plantation companies in the Colombo Stock Exchange ("CSE"). CSE has 19 listed companies under the plantation sector. The peer group for HPL, however, could not accommodate all the companies given the differences in plantation mix among the companies in the plantation sector. NDBIB selected the following 5 companies based on similarities in plantation mix and business operations compared to HPL and the level of liquidity of the respective Company's shares.

| Peer Company | % of Revenue from Tea |
|---|---|
| Talawakelle Tea Estates PLC | *97.1%* |
| Bogawantalawa Tea Estates PLC | *100.0%* |
| Udapussellawa Plantations PLC | *97.8%* |
| Maskeliya Plantations PLC | *100.0%* |
| Madulsima Plantations PLC | *100.0%* |

NDBIB considered EV/EBITDA and P/BV as appropriate Relative Valuation Methods for the valuation of HPL shares. P/E ratio was not considered due to the significant variations in capital structure among the selected peer companies.

| Company | Market Cap. * | EV/EBITDA (x) *‡† | P/BV(x) *† | EBITDA Margin ‡ | ROE ‡† |
|---|---|---|---|---|---|
| Talawakelle Tea Estates PLC | 1,196.1 | 2.15 | 0.55 | 18.2% | 26.2% |
| Bogawantalawa Tea Estates PLC | 1,319.9 | 4.32 | 0.85 | 13.4% | 15.8% |
| Udapussellawa Plantations PLC | 712.4 | 4.24 | 1.05 | 10.6% | 19.4% |
| Maskeliya Plantations PLC | 923.7 | 3.71 | 0.87 | 14.3% | 28.9% |
| Madulsima Plantations PLC | 2,625.7 | 8.64 | 0.97 | 15.4% | 0.1% |
| **Mean** | **1,355.6** | **4.61** | **0.86** | **14.4%** | **18.1%** |
| **Median** | **1,196.1** | **4.24** | **0.87** | **14.3%** | **19.4%** |

**Market Capitalisation is based on the 3-month VWAP up to September 29, 2017. The market prices for shares in plantation sector is experiencing a significant increase since Mid-2017 and this increase might not hold in the long run. Hence, 3 month VWAP was used to normalise the market prices of peer companies.*

*‡EBITDA, Revenue, Earnings are on TTM basis for the period ending September 30, 2017 as per the financials published on CSE.*

*†NAV and Net Debt as at September 30, 2017 as per financials published on CSE.*

NDBIB decided to calculate the Relative Value of HPL based on Median EV/EBITDA and Median PBV to determine the Relative value of HPL shares.

### 7.3.1. Relative Valuation Based on Peer Median EV/EBITDA

| | (LKR Mn) |
|---|---|
| TTM EBITDA up to September 30, 2017 | 597.4 |
| Peer Median EV/EBITDA | 4.24 |
| **Enterprise Value** | **2,531.3** |
| Less: Net Debt | (283.7) |
| **Equity Value** | **2,247.6** |
| **Value per Share (LKR)** | **9.50** |

Based on the Peer Median EV/EBITDA Approach, the total equity value of HPL amounts to
**LKR 2.25 Bn with a per share value of LKR 9.50**

### 7.3.2. Relative Valuation Based on Peer Median P/BV

| | LKR Mn |
|---|---|
| Net Asset Value as at September 30, 2017 | **1,856.2** |
| Net Assets Value per Share | **7.84** |
| Median P/BV | 0.87 |
| **Equity Value per Share (LKR)** | **6.84** |

Based on the Peer Median P/BV Approach, the total equity value of HPL amounts to
**LKR 1.62 Bn with a per share value of LKR 6.84**

## 8.0 THE RECOMMENDED REFERENCE PRICE

A summary of the valuation results highlighted in the preceding section is given below:

| | NAV | DCF | Peer EV/EBITDA | Peer P/BV | Average |
|---|---|---|---|---|---|
| **Equity Value (LKR Mn)** | **1,856.2** | **1,661.3** | **2,247.6** | **1,619.5** | **1,846.2** |
| **Value per Share (LKR)** | **7.84** | **7.02** | **9.50** | **6.84** | **7.80** |
| | | | | | |
| P/BV | 1.00 | 0.90 | 1.21 | 0.87 | |
| Trailing EV/EBITDA | 3.58 | 3.26 | 4.24 | 3.19 | |
| Forward EV/EBITDA | 3.99 | 3.63 | 4.72 | 3.55 | |

The Value of HPL shares based on the aforementioned valuation method indicates that the intrinsic value of HPL is within a range of LKR 6.84 to LKR 9.50. Given the Company’s business fundamentals and the industry dynamics, NDBIB believes HPL shares would have a fair value of c. **LKR 7.80** per share.

Hence, NDBIB Recommends **LKR 7.80** as the reference price for HPL for trading purposes at the Colombo Stock Exchange.

## 9.0 RESEARCH TEAM

**NDB INVESTMENT BANK LIMITED ("NDBIB")**

**Nilendra Weerasinghe –Vice President - Head of Corporate Advisory**

Nilendra specialises in the structuring and placement of IPOs with over eight years of experience in investment banking. Nilendra has been part of the NDBIB team for numerous IPOs managed by the company including that of People's Leasing and Finance, Singer Finance, Access Engineering, Union Bank, People's Insurance and RIL Property. He also has a wide array of experience having been involved in in project financing, loan syndications and mergers and acquisitions.

Nilendra is a CFA Charterholder and a graduate in Computer Science and Engineering with a First Class Honours Degree from University of Moratuwa. He also holds an MBA in Strategy and Operations from National University of Singapore. His previous work experience includes Goldman Sachs in Singapore where he was involved in advising and raising equity funds via IPOs for clients in the Southeast Asian region.

**Viraj Wijesinghe - Assistant Vice President**

Viraj possesses over ten years of experience in corporate finance, financial risk management, and investment banking. He joined NDB Investment Bank as an Assistant Vice President in 2014. Viraj has been a part of quite a few transactions with the NDBIB Corporate Advisory team. Notable transactions include IPOs of People's Insurance and Ooredoo Maldives, the acquisition of E-channelling PLC, loan syndications to Atmosphere Hotels and Resorts.

Viraj is a CFA Charterholder, a certified Financial Risk Manager (FRM) from GARP in USA, an Associate Member of CIMA (UK), and an Attorney-at-Law. Further, he is a graduate in Finance, from the University of Colombo.

His previous work experience includes Universal Enterprises Private Limited in the Republic of Maldives, where he functioned as its Group Treasury Manager, and Amba Research Lanka Limited (Currently Moody's Analytics), where he worked as an Investment Research Analyst.

**Sujani Perera – Manager**

Sujani has been a team member of many successful equity and debt offering covering various industry sectors (banking, finance, leasing, construction, energy, IT etc.) including the second largest IPO on the CSE to date i.e. People's Leasing and Finance PLC. She has been with the Corporate Advisory Team for over nine years.

Sujani is responsible for the preparation of legal documents relating to IPOs, Listings via Introductions, loan syndication, debenture issues, group restructurings, Private Placements, Rights Issue, Preference Share Issue and Share Repurchase Transactions. Sujani was instrumental in executing over LKR 1 Bn loan syndication to facilitate the capital restructuring process of Resus Energy PLC (former Hemas Power PLC).

She obtained BSc in Finance (First Class) from University of Sri Jayewardenepura, Sri Lanka and Masters in Financial Economics, Merit Pass from University of Colombo. Sujani is an Associate Member CIMA (UK).

**Mithum Peiris – Management Associate**

Mithum is a graduate with a First Class Honours Degree in Civil Engineering from University of Moratuwa and a CFA Level III Candidate. He is a CIMA Passed Finalist, where he completed the examinations in May 2014. Mithum joined NDBIB in April 2017, and has since been involved in multiple transactions including equity and debt fund raisings, financial feasibility studies and corporate restructuring exercises.

## 10.0 DISCLAIMER

The information, forecasts, analyses, assumptions and opinions contained herein have been compiled or arrived at solely based on information provided to NDBIB by the Client/HPL. Such information has not been independently verified and no guarantee, representation or warranty, expressed or implied is made as to its accuracy, completeness or correctness. Nothing contained in this Research Report is, or shall be relied upon as, a promise or representation by NDBIB. All such information is subject to change without notice and such changes could be due to unforeseen circumstances. This Research Report is for information purposes only and does not purport to be a complete description of the subject matter presented herein.

Any estimate, projection, opinion, forecast and valuation contained in this Research Report involve significant elements of subjective judgment and analysis, which may or may not be correct. No representation is made that any estimate, projection or forecast will be achieved. The actual future events may vary significantly from the estimates, projections, forecasts or valuation and each estimate, projection, forecast or valuation is based on a number of assumptions and is subject to matters which are outside the control of NDBIB. Verification of assets of HPL and evaluation of agreements between clients of HPL have not been carried out during this exercise.

Accordingly, NDBIB shall not be liable for any loss or damage howsoever arising as a result of any person acting or refraining from acting in reliance on this document or information, forecast analysis and opinion contained herein. The recipients of this Research Report and/or Investors are expected to carry out their own independent evaluations taking into consideration macro-economic variables and other relevant conditions.

The valuation presented herein is valid for a period of six months (06) from the date of this Report i.e. November 22, 2017, however, subject to there being no material changes to the parameters impacting operations of HPL.