

CASE STUDY

Total marks: 100

Time allowed: 4:30 hours

Instructions:

1. Check that your question paper contains all the exhibits as mentioned in page 3. The consecutive page numbering may be found under the base line at the foot of each page.
2. Use the answer script provided by the Institute. Write your name, roll no., registration no. and name of the subject on the upper portion of the cover page of the answer script.
3. Candidates are asked not to write any particulars of identification in any other place of the answer script and additional pages if taken.
4. Questions must be answered in English.
5. The answer should be referenced to the relevant workings.
6. Answer script and additional page(s) taken to write answer, used or unused, must not be removed or taken away from the Examination Hall.

Requirements & Marks Allocation:

You are Robiul Islam, Senior Manager at Ahsan Habib & Co., Chartered Accountants (AHC). You directly report to Partner of the firm, Mr. Ahsan Habib FCA. Your firm AHC has been appointed as a consultant of the Zenith Agro Business Ltd. (Zenith). Mr. Habib, partner of the firm, has received an e-mail from Mr. Zakir Khan, Managing Director (Exhibit-1) of the Zenith. Mr. Habib has asked you to prepare a report covering all the requirements stated in the e-mail of Mr. Zakir Khan.

Requirements:

You are required to prepare a draft report for Mr. Ahsan Habib FCA. Your report should comprise the following elements:

- ❖ An executive summary
- ❖ Your responses to the detailed requirements (a), (b) and (c) set out in Exhibit-1.
- ❖ State clearly any assumptions that you make.

Of the total marks, 10% are included for the relevant discussions of ethical issues within your answer to the requirements.

Marks Allocation:

All of the marks in the Case Study are awarded for the demonstration of professional skills, allocated broadly as follows:

Requirements	Professional Skills					Total
	Assimilating and using information	Structuring Problems and solutions	Applying Judgment	Conclusions and making recommendations	Integrative & multidisciplinary skills	
Executive Summary	3	3	3	3	0	12
Requirement (a)	3	5	4	4	2	18
Requirement (b) (i) (ii) (iii) (iv)	4	4	2	2	0	12
	4	4	4	4	2	18
	0	3	3	4	0	10
	2	2	2	2	2	10
Requirement (c) (i) (ii)	2	2	2	2	2	10
	2	2	2	2	2	10
Total	20	25	22	23	10	100

In planning your report, you should be aware that not attempting one of the requirements, including an executive summary, will have a significantly detrimental effect on your chances of success. In addition, as indicated above, all skills areas will be assessed under each element of your report.

You should be clear that marks are awarded for demonstrating your professional skills, not for reproducing facts from the case. To be successful, you will need to:

- Demonstrate your knowledge of the case material and make use of your analysis.
- Carryout relevant analysis of the problems and structure your proposed solutions.
- Apply your judgment based on the analysis that you have carried out
- Draw conclusions from your analysis and judgment and develop them into practical commercial recommendations.
- Ethical issues may cover the following topic-
 - Lack of professional independence or objectivity
 - Conflict of interest among stakeholders
 - Doubtful accounting or commercial practice or market competition or Market proximity
 - Inappropriate pressure to achieve a reported result.
 - Compliance of local laws and regulations
- Integrative & multidisciplinary skills may cover the following areas-
 - Depletion and wastage of natural resources and its impact on environment and climate change.
 - Impact on pollution, on the public health and productivity and on the national health budget.
 - Social impacts, e.g. social unrest for allowing use of alcohol, bar, etc.
 - Economic impacts, e.g. on employment generation and improvement in connectivity using ICT.

LIST OF EXHIBITS

Exhibit	Description	Page reference
1	E-mail from Mr. Zakir Khan, Managing Director of Zenith. to AHC.	4
2	A brief note on Zenith's business operation.	5 - 8
3	Summary and Extracts of Financial Statements of the Zenith.	9 - 10
4	A brief note on Agro Business Industry in Bangladesh.	11 - 12
5	E-mail from Mr. Rahat Hossain on reporting and compliance issues.	13
6	E-mail from Mr. Anika Chowdhury regarding business plans.	14 - 15
7	Environmental, health and ethical issues.	16
8	News Clips regarding Agro Business industry.	17 - 18

List of persons in the Case and their Roles

SL.	Names	Roles
1	Robiul Islam (You)	Senior Manager at AHC
2	Ahsan Habib FCA	Partner of AHC
3	Zaved Khan	Chairman of the Board
4	Zakir Khan	Managing Director at Zenith
5	Tahmina Khatun	Non-Executive Director
6	Anika Chowdhury	Operations Director
7	Rahat Hossain	Finance Director

E-MAIL

From : Mr. Zakir Khan, Managing Director at Zenith
To : Mr. Ahsan Habib FCA, Partner, AHC
Subject : Confirmation of appointment for advisory engagement.
Date : 15 July 2022

Dear Mr. Habib,

Congratulations! The Board of Zenith Agro Business Ltd. (Zenith) has voted in favour of renewing business advisory agreement with your firm Ahsan Habib & Co., Chartered Accountants (AHC). Similar to existing agreement, your areas of works will be:

- Assess and analyze business operations for formulating business strategies
- Evaluation of strategic options and viability of financing and investment opportunities considering past performances & prospects of the company and related business issues.
- Assist us in initial public offering (IPO) of shares, Issuance of Bond, Evaluating investment options, Risk Management, Governance, Due Diligence, Restructuring, etc.
- Advice and review Accounting, Tax, financial and internal control related issues of the company.
- Support on various regulatory and secretarial matters as and when solicited.

While praising the service AHC provided in past years, the board has approved a fee of BDT 3,500,000 after 10% increase for the upcoming year.

We are currently reviewing our current business positions and analyzing available strategic options where we need input from your firm. In this regard, I am sharing a brief note on Zenith Agro Business Ltd., its operation, and its plans (**Exhibit 2**). I am also sharing the extracts of financial statements of the Zenith for the year ended 31 December 2021 (**Exhibit 3**). For your easy reference I have attached a brief note about Agro Business industry of Bangladesh (**Exhibit 4**) and copy of emails from our Finance Director (**Exhibit 5**) and Operations Director (**Exhibit 6**). Apart from these, please take into consideration the relevant information provided in **Exhibits 7 to 8** for your analysis and to draw your conclusion and recommendations for the requirements stated below.

You are required to prepare a **draft report** for the board which should include an **Executive Summary** and cover:

- (a) Evaluation of financial and non-financial performances of Zenith Agro Business Ltd. and its current financial position considering the adjustments for reporting and compliance issues stated in **Exhibit-5**.
- (b) (i) Evaluate of the Strengths, Weaknesses, Opportunities, and Threats (SWOT) of Zenith's existing business;
(ii) Identify & critically analyse the strategic options available at the hand of Zenith's board of directors; and
(iii) Based on your analysis in (i) and evolution in (ii), recommend to the Board with justification(s), the best investment option to be executed for increasing shareholders' wealth and return.
(iv) Advise the Board on the best option available for financing the selected investment option.
- (c) (i) Assess the four pillars of Sustainability (*Human, Social, Economic and Environmental*) for Zenith Agro Business Ltd. and
(ii) Comment on the ethical issues of Zenith's practices relating to its business operations.

Clearly state the assumptions used and provide your workings as annexure(s) to the report. I look forward to receiving your draft report on or before 21 July 2022.

Yours sincerely,

Zakir Khan

Managing Director at Zenith

Brief note on Zenith Agro Business Ltd. and its operation**Company Background**

Zenith Agro Business Ltd. was established by Mr. Sarwar Khan and his wife in 1998 in a sub-urban area of Noakhali. Mr. Sarwar worked in Agro business industry and livestock firms for many years in European countries before returning to Bangladesh in 1997. He had first-hand knowledge and experience of agro business which he planned to use in his hometown at Noakhali. One year after his return to Bangladesh, he established Zenith Agro Business Ltd. with his life savings. He started off with commercially cultivating vegetables on his family properties. He used to sell produced vegetables in local market at Noakhali.

In the first year, Mr. Sarwar failed to break even. He then found out that there is not much demand in his local market. Much of the population in his area prefers to have self-grown vegetables in their meal. Most of his harvest remains unsold or has to be sold at price lower than his production cost. He also found that fixed cost of production is very high. He quickly got into action and started to scout other vegetable markets. He got in touch with a wholesaler who buys vegetable in bulk and sells to retailers in various markets. Wholesaler bought vegetables weekly from Mr. Sarwar and sold to retailers of nearby markets. This created an opportunity for Mr. Sarwar to sell his vegetables at regular price and without much wastage.

Mr. Sarwar then focused on reducing fixed costs. He noticed that much of his fixed cost was coming from labour, which was needed to prepare the soil, cultivating, and harvesting vegetables, nursing the plants etc. He noticed that his labours remain idle at least one third of the working hours. He then thought of removing idle hours by growing vegetables in more lands. This will create economics of scale and reduce fixed cost per Kilogram of vegetables. He then started to take lease of nearby vacant or underutilized lands at cheaper rates. In his new lands he expanded his farm and started growing vegetables some of which are of high value due to uniqueness and different from the vegetables available the market.

Mr. Khan once had a disagreement with his wholesaler over price of the vegetables as wholesaler refused to pay more despite the retail price was very high. Mr. Khan then hired a pickup truck and took his vegetables to Karwan Bazar vegetable market at Dhaka. He found a wholesaler at Karwan Bazar and was able to sell all of his vegetables. Even after all the expenses, he was able to generate slightly higher profit than that of from previous wholesaler. From then on Mr. Khan started to sell most of his vegetables to Karwan Bazar. Soon he noticed that there are many items that he can produce and sell at Karwan Bazar. Accordingly, he started to grow new types of vegetables. He even started a fishery to produce various type of local fishes. He then sold these fishes to Karwan Bazar fish market. He later started to purchase vegetables from local producers and sell them to Karwan Bazar and other vegetable markets at Dhaka.

In 2012, Mr. Sarwar Khan expired on sudden illness. His two son Mr. Zakir Khan and Zaved Khan took over the business operations and 43.75% shares of the company each. Their mother Tahmina Khatun held 12.5% of shares and sat on the board as non-executive member.

Both of the brothers were business graduates and already experienced with the business operations of his father. Both the brothers planned to modernize the business by redesigning the business model, introducing new tools and technology. Under the leadership of two brothers, business size of Zenith increased significantly. As business grew, both the brothers recruited several department heads and delegated various business functions and authority.

Business Model

Although Zenith started its operation with vegetable productions only, it now expanded to various agro based business. At present, Zenith's operation includes 3 business divisions: vegetables growing, Fish production and dairy production. Each of the business division headed by separate division manager but follows similar business model.

Vegetable production:

Vegetable production is the primary operation of Zenith. It has leased and company owned lands where it grows various types of vegetables. Common vegetables it produces includes carrot, cauliflower, cucumber, eggplant, papaya and green pepper. Broccoli: It also produces exotic vegetables like broccoli, asparagus, colored capsicum, Cherry Tomato, Red cabbage etc. Zenith has 200 Decimal land under its control, half of which is self-owned and remaining through lease.

Zenith prepares the soils and plants seeds. Zenith keeps some seeds from previous production. Also, sometimes it purchases seeds from others. In case of exotic vegetables, Zenith often imports the seeds. However, most of the time seeds are sourced internally. Zenith has its own tractors to prepare the field. It dispenses fertilizer to ensure supply

of nutrients in the soil necessary for growing vegetables. It also ensures supply of water for the plants as and when required. As part of the modernization, Zenith has installed automatic sprinkler which is used to watering the plants. Nearly 80 people works at the Vegetable field who are responsible for tractor operation, field preparation, planting seeds, harvesting, washing and packaging the vegetables for transporting to the markets.

At present, Zenith sales most of its vegetables to chain super shops. It harvests its vegetables at afternoon and ships overnight to ensure availability for super shops in the early morning. If any vegetable is not available within its vegetable project, it sources the vegetables from other local vegetable sellers. Zenith doesn't have any control over productions done by local vegetable sellers. Super Shops customers are happy to get fresh green vegetables everyday morning. For vegetable production, key focus is on quality of vegetables which mostly depends on quality of seeds and care given during vegetable growing. If the seed quality is not up to the mark or adequate care is not taken, quality of vegetable drops significantly. Also, the vegetable production reduces significantly.

Zenith also sales to Karwan Bazar and local market wholesalers when they have excess production. In case of short supply, Zenith simply purchase it from local markets and supply to the super shops. In recent times, cost of pesticides, labor and transportation has become a significant headache for Zenith. It takes away most of the gross profit from vegetable productions. Also, there are already rumor in the market that cost of fuel will increase in next couple of months. If this really happens, transportation costs and fuel expense will increase.

Fish production:

Zenith has 5 large ponds where it produces freshwater fishes where it produces Katla, rui, mrigal, common carp, boal, pabda, chital, koi, shol, gozar, various types of catfish etc. Initially Zenith started with a pond but as business grew, it leased 4 more ponds. In order to produce fish, Zenith needs fish fry. Although Zenith produce small scale fries but most of the demand is met by sourcing from external source. Size and quality of fish depends on the quality of fries and fish feeds. Feeding high quality fish feed ensures maximum production. Various types of fish feed prepared for commercial production are available in the market.

One of the key challenges in fish production is survival of fries when released in the ponds. Another challenge is maintaining pH level of water. Significant fluctuation in pH level can be damaging in fish production.

Most of the fish produced are sold to Karwan Bazar fish market. Only one third of fish produced are sold to super shops and in local markets. Fishes are transported in water drums to keep them alive or packaged in Styrofoam cooler box with ice. Zenith buys the Styrofoam boxes and ices from local market. It has rents trucks to transport the iced boxed and water drums to Karwan Bazar and super shops. However, it uses rickshaw vans when transporting to local markets.

Dairy production:

Dairy production is the largest division at Zenith. Dairy production is new business division added 5 years ago. Zenith had a vacant land where it built a cattle house. At the beginning, primary objective was rearing some cows for few months and then sell off during Qurbani Eid (Muslim festival) at higher price when demand suddenly surge. After couple of years, it was noted that few cows remain unsold during Qurbani Eid. Price of the cows also drops significantly after Qurbani Eid as demand for meat decreases overnight. Zenith management then decided to start a full-time livestock and dairy farming. It purchased few calves at a very low price and added with unsold cows.

At present Zenith has 80 Cows and 20 bulls in its farm which includes breeds like Sahiwal, Sindhi, Holstein-Friesian, Red Chittagong Cattle, Pabna Cattle, and Mirkadim etc. These cows produce around 650–700-liter milk per day. This huge operation is supported by technology. Machines are used to extract milk from the cows and accumulate in the chiller. Then these milks are filled in containers and sold to local market and other branded milk companies. During Qurbani Eid, Zenith sells most of its bulls and few cows. In other times, it sells beef to local market and to super shops.

Dairy farming is capital intensive as the cattle itself require huge investment. It also requires investment in cattle feeds. Quality of feeds is directly connected with the milks and meats it produces. Zenith feeds the cattle with grasses from its vegetable fields. It also grows special grass in its fields. Apart from that it buys cattle feeds from external suppliers.

Hygiene is very crucial in dairy farming. Zenith employees cleans the cattle housing regularly with antiseptics and anti-bacterial. They also ensure medicines and vaccines are given to cows when required.

Key Management

Board of Zenith Agro Business Ltd. is headed by Mr. Zaved Khan, who is the Chairman of the Company. His brother Mr. Zakir Khan is the managing director of the company. Together they own majority shares of the company. Their mother Tahmina Khatun sits in the board as minority shareholder and non-executive director.

Current Shareholding position and members of the board are as follow:

Name of the Shareholders	Ownership Percentage	Position at the board
Zaved Khan	43.75%	Chairman of the board
Zakir Khan	43.75%	Managing Director & CEO
Tahmina Khatun	12.5%	Non-Executive Director
Anika Chowdhury	0%	Operations Director
Rahat Hossain	0%	Finance Director

External Auditors

Karim Khan & Co. Chartered Accountants (KKC) has been appointed as statutory auditor of the company in the board meeting held in September 2021. Karim Khan FCA, managing partner of KKC, is the cousin of Mr. Zaved Khan and Zakir Khan. He has been helping Zenith in preparation of financial statements and filling the tax returns for many years.

Zenith's financial statement for the year ended 30 June 2021 was audited by Shamur Rahman & Co., Chartered Accountants (SRC) which whom Zenith management had a disagreement. As a result, Zenith Changed its auditor for the year ended 30 June 2022 and appointed KKC. KKC did not obtain any professional clearance. KKC believed that as it prepared financial statements for earlier years, it already has knowledge about opening balance. Therefore, it did not confirm opening balance. KKC audited the financial statements prepared in accordance with International Financial Reporting Standards (IFRSs) and issued a draft financial statement for the year ended 30 June 2022 [**EXHIBIT – 3**].

Operational issues

Zenith's Business operations are overseen directly by Operation director Mrs. Anika Chowdhury who supervises all the business divisions. Despite having various initiatives Zenith are currently facing several operational issues.

The biggest challenge of agro business is that most of its produces are quickly perishable. Harvested vegetables, meats and fishes need to be sold and consumed quickly. Although freezing can help to enhance the consumption time, but it loses taste and value of fresh food in the process.

In agro business competition is huge. There are numerous farms that produce similar vegetables across the country. In recent years, many smaller farms have popped out throughout the country. Also, vast options are available for the customers to purchase agricultural goods of their choice. This can make it very difficult for farmers to move into new markets or independently establish themselves. If production increases due to favorable weather and conditions, price falls due to excess demand. Sometime price drops below the production cost.

Success of agro business is heavily dependent of the inputs like seeds, fish fry and cow breeds. Zenith purchase most of these inputs from external sources. Quality of these inputs are not sometime up to the marks which leads to production lower than expected, inferior quality vegetables and fishes etc.

Another big challenge is managing huge amount of cattle wastage produced every day. Although it uses some portion of these wastage as fertilizer in the field, but significant portion are disposed in a nearby land leased by Zenith. Management tried to sell/give away dry manure as fuel to local people to be used in cooking. However, as people started to use Liquefied Petroleum Gas (LPG) for cooking, there is almost no demand for manure fuel. As a result, these cattle wastage are piling up every day.

Future business plan

Besides the investment plans stated in **Exhibit-6**, Zenith has further plans for related and unrelated diversifications in future. Zenith Plans to open several sweet shops under the brand 'Zenith Premium Sweets'. Initially it will start selling in the local area and gradually expand in townships in Dhaka & Chattagram. It will make butter, sweets and yogurts form the milk produced in own dairy firm.

It also plans to open meat shops under the brand "Zenith Meat Shop" where Zenith will sell beef produced at its own farm. This way Zenith will be able to lower its dependency for Qurbani season. It will be able to sell its cattle throughout the year.

Zenith produces huge amount of milk every day most of which are sold to private brand companies. Zenith plans to start its own milk brand where it will sell pasteurized and 'ready to drink' milks under the brand 'Zenith Dairy Milk'. Zenith is currently considering selling its produce online. Zenith Also have plan to open a restaurant serving foods prepared with the vegetable, fish and meat produced at Zenith premises.

In order to support all these plans, Zenith is also planning to scale up its current operation. It is searching for lands near to Dhaka to expand its current production and reduce transportation cost.

Financing strategy

At present, Zenith's operation is financed by reinvestment of profits earned and loans from banks. It also received some govt. grants as incentive for running agro business. Management plans to continue financing growth with bank loans. However, they are being concerned about increase of financing expenses. Board is currently considering including new investor and issue new shares to raise fund for the company. At present board is exploring to find out financing options suitable for the company.

Environmental and safety policy

Zenith management is concerned about on environment and safety issues. It ensures its employees wear safety gears when working at the fields and the dairy house. It encourages use of right amount of pesticides and avoiding use of chemical fertilizers while growing vegetables. It encourages recycling wastages produced. Zenith emphasize on avoiding use of plastic materials. It does not use any plastic material for packaging and transporting vegetables, fishes and meats. It uses metal or containers to deliver milk to branded companies. It, however, uses some plastic bags to deliver milks to local customers.

The company also have focus on employee safety. Employees were always given training on regular basis. It also ensured first aid kits throughout Zenith premises. Zenith has set up solar panels to generate light the premises which helped to reduce heating and lighting costs.

Corporate Social responsibility

Zenith management have undertaken following activities as part of their corporate social responsibilities:

- Going green on food. Company aims to produce which are not genetically modified.
- Company ensures regular staff training and minimal wastage.
- Zenith recycles most of the wastages. It feeds most of the vegetable plants to its cows once vegetables are harvested. Cattle leftovers are used in fisheries and vegetable fields as fertilizer.
- Zenith tries to ensure fresh foods for its customers. It avoids unnecessary pesticides and medicines in its produce.
- Zenith is training village women about rearing cattle. It plans to buy milk from the cattle these women will be rearing. This way these women will be able to earn and will be empowered.

Summary and Extracts of Financial Statements of the Zenith Agro Business Ltd.

Zenith Agro Business Limited
Statement of Financial Position
As of 30 June 2022

	30-Jun-22	Figures in BDT 30-Jun-21
Assets		
Non-current Assets		
Property, Plant & Equipment	71,411,648	79,346,275
Right of use assets	14,878,900	16,532,115
Investments	2,014,180	2,014,180
Deferred tax assets	1,514,589	931,386
	89,819,317	98,823,956
Current Assets		
Biological assets	20,435,495	19,099,165
Inventories	2,942,680	826,330
Trade & Other receivables	5,232,283	3,412,042
Advance, Deposits & Pre-payments	12,089,350	9,410,475
Cash & Cash Equivalents	5,514,242	2,109,212
	46,214,050	34,857,224
	136,033,367	133,681,180
Equity & Liabilities		
Shareholders' Equity		
Share Capital	100,000,000	100,000,000
Retained Earnings	(2,297,882)	(6,456,193)
	97,702,118	93,543,807
Non-Current Liabilities		
Long term borrowings	5,090,359	3,309,386
Lease liabilities	7,740,749	9,656,886
Gratuity obligation	8,889,238	8,453,289
	21,720,346	21,419,561
Current Liabilities		
Short Term Borrowings	1,233,498	2,835,211
Trade and other Payables	6,520,791	3,017,267
Provisions and other liabilities	5,202,439	9,833,319
Income tax payables	3,654,175	3,032,015
	16,610,903	18,717,812
	136,033,367	133,681,180

Zenith Agro Business Limited
Statement of Changes in Equity
As of 30 June 2022

Particulars	Share Capital	Retained Earnings	Figures in BDT Total
Balance as on 01 July 2020	100,000,000	(8,621,196)	91,378,804
Profit for the year	-	2,165,003	2,165,003
Balance as on 30 June 2021	100,000,000	(6,456,193)	93,543,807
Profit for the year	-	4,158,311	4,158,311
Balance as on 30 June 2022	100,000,000	(2,297,882)	97,702,118

Statement of Profit or Loss and Other Comprehensive Income

For the year ended 30 June 2022

	2022	<i>Figures in BDT</i> 2021
Sales	235,376,165	200,804,966
Less: Cost of Sales	(201,054,444)	(170,577,982)
Gross Profit	34,321,721	30,226,984
Less: Operative expenses	(28,001,116)	(25,624,253)
Net operating profit	6,320,605	4,602,731
Less: Finance Charges	(592,615)	(1,422,133)
Profit before WPPF & Tax	5,727,990	3,180,598
Less: Provision for WPPF	(286,400)	(159,030)
Profit before Tax	5,441,590	3,021,568
Less: Current Tax Expenses	(1,866,482)	(1,787,951)
Deferred Tax income	583,203	931,386
Profit for the year	4,158,311	2,165,003
Other Comprehensive Income	-	-
	4,158,311	2,165,003

Notes to the financial statements

Note-01 Revenue

	2022	2021
Vegetable production	70,612,850	62,249,540
Fish Production	35,306,425	28,112,695
Dairy Operation	129,456,890	110,442,731
	235,376,165	200,804,966

Note-02 Cost of Revenue

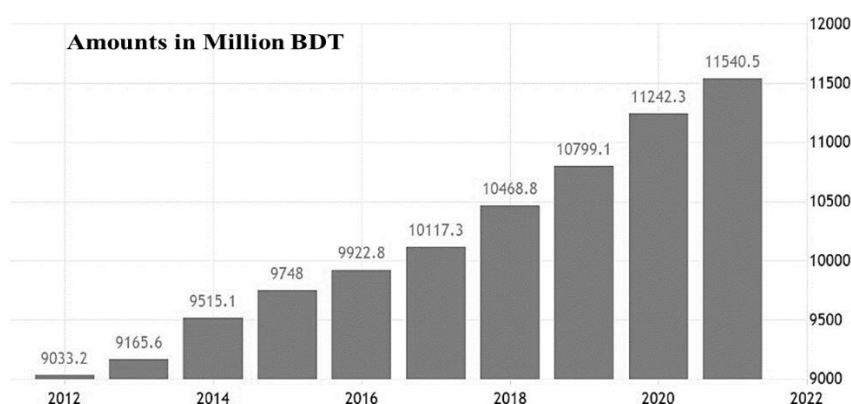
	2022	2021
Vegetable production	62,326,878	54,584,955
Fish Production	28,147,622	21,322,248
Dairy Operation	110,579,944	94,670,779
	201,054,444	170,577,982

Summary of 5 Year Financial Information

	<i>Figures in BDT</i>				
Significant Line Items	30-Jun-22	30-Jun-21	30-Jun-20	30-Jun-19	30-Jun-18
Revenue	235,376,165	200,804,966	172,692,271	145,061,508	133,456,587
Gross profit	34,321,721	30,226,984	27,808,825	25,862,207	24,258,750
Net profit	4,158,311	2,165,003	1,008,947	338,052	(3,902,967)
Share capital	100,000,000	100,000,000	100,000,000	100,000,000	100,000,000
Total Equity	97,702,118	93,543,807	91,378,804	90,369,857	90,031,805
Current Assets	46,214,050	34,857,224	29,628,640	23,702,912	18,488,272
Non-Current Asset	89,819,317	98,823,956	100,800,435	102,816,444	104,872,773
Current Liabilities	16,610,903	18,717,812	18,530,634	17,604,102	15,843,692
Non-Current Liabilities	21,720,346	21,419,561	20,519,638	18,545,397	17,485,547
NAV	13.6	13.4	13.0	12.7	12.3
EPS	0.42	0.22	0.18	0.06	-0.71

A brief note on Agro-business Industry in Bangladesh.

Agro-industry plays a pivotal role in pro-poor growth strategies in Bangladesh where major percentage of the poor live in rural area. The development of agro-industry has an important impact on the local agricultural sector as well as the livelihoods of small holder farmers. GDP from Agriculture in Bangladesh increased to 11540.50 BDT Million in 2021 from 11242.30 BDT Million in 2020. Although the share of Agriculture in total GDP of Bangladesh has declined at 11.63% in 2021 compared to 16.17% in 2012, Contribution in terms of Taka is substantially increasing over the years as depicted in the following graph.



Source: World bank Data

Prospects of Agro-business in Bangladesh

In Bangladesh, rice and vegetables are the staple food, so it has high production as well as demand. It is hard for traditional farmers to meet the domestic demand of rice and vegetables. In recent years, there has been a shift to modernize the agricultural process. Use of modern technology and equipment is being used at increasing rate. As benefits of globalization, consumers are getting the opportunities to know more about different types of fruits, vegetables fishes and various plant-based foods. As a result, new demands are being created for these new items. Consumer's increasing demand helps to rapid expansion of agro industries.

Availability of labor with a cheap wage rate also foster the growth of agro-industries like garment sector. As most of the rural side labor of this country has farming experience, so they can work easily with a little training. Besides, youth employed educated personnel are entering into agro-business industry. Therefore, it is very easy for agro-industries to maintain a healthy number of human resources.

Finance is the most vital and challenging part for an entrepreneur of agro industry. Government has declared single digit interest-based loan for agro-industries which implementation is under processing. Government support for this industry is spontaneous. They provide as much support as they can from establishment to maintain of agro-industries. Government provides infrastructural support to less developed rural areas to ensure balanced agro based industrial development.

Challenges of agro-business in Bangladesh

To establish and run an agro-industry, the entrepreneurs need to arrange a large number of capitals. Most of the agro-industries are dependent on external source of financing, rather internal financing. It mostly depends on government and commercial banks. To arrange capital from external source, they have to bear a large amount of cost of capital. The interest rate also fluctuates time to time. When market falls or demand decreases in the market, it becomes difficult for the agro-entrepreneurs to repay the instalment on time. Sometimes they are declared as bankrupt.

Trading system faces great challenges. Most of the industry has to sell product to wholesalers or retailers on due basis. It is almost impossible to make all transaction in cash basis as a result creation of bad debt is unavoidable and the number of bad debt rate is high in this sector. Sometimes, there is a problem of trustworthiness of the customer and retailer.

Technology is a great challenge to small scale agro-industries. Though there is availability of modern machines and technology but almost all the technology installation expenditures are very high. In most cases, entrepreneurs have to purchase manufacturing and service providing technologies for this sector from abroad paying a high price. Though some Bangladeshi technologies are being used in small scale but that number is very negligible.

Another key challenge of this industry is lack of managerial knowledge. In most of the agro based business entities, executives of these business have lack of knowledge and management ability to use their industrial resources efficiently and effectively. They follow self-assumptions and previous business experience to deal with recent and upcoming challenges.

Very few agro-industries are connected with research institutions but almost all the agro-industries has no connection; even they do not feel the need of connection with research organization. An industry can prosper if it continues research for generating or upgrading product and business procedures. Agro-based government and non-government research institutions, universities who work on development of new variety of raw material, finished goods, human resource development, entrepreneurial development, marketing, accounts maintaining, operation development, etc., sometimes are reluctant to connect with medium and small scale agro-industries.

Industrial law, environment law and labor law are not properly followed by the firm. So appropriate implementation of this law is mandatory for proper growth of this sector. Most of the time, agro-entrepreneurs do not follow the proper environment law; they haphazardly establish factory beside populated area without building necessary drainage system, smoke emission system, storage etc.

Transport is a vital factor for the success of this industries. Though very few of the well-established industries have its own transportation system but most of the agro-industries have to depend on rented transport which increase the cost of product.

Way out to overcome the challenges

Government may plan to introduce a complete package for the benefits of young Agri-entrepreneur that will provide technical advice, land management ideas, easy access of funding, continuous guidance/monitoring, and services on marketing. Easy access of finance from government as well as other specialized and non-government organization and attractive foreign investment are needed to boost up the ago-industrial sector. Government should ensure proper infrastructural facilities to rural areas to create overall employment opportunity and to stop rapid migration by establish agro-based industries. Government in principle agreed to allow agricultural projects like constructing silos for storage, distribution vehicles for transporting agricultural produce to the cities under public-private procurement arrangement.

Government may adopt policies to create realistic and agro-industrial friendly environment and economy. Research organizations need to be connected with agro-industries to ensure sustainable industrial growth, employment creation, introduce varieties of product line and to explore exclusive managing process. Government assistance will be highly beneficial for this sector.

Environment friendly and renewable energy based agro-industries need to be established as it is a national as well as international demand. Agro-entrepreneurs could provide employment opportunity for both men and women of the rural areas.

E-mail from Zenith Finance Director

From : Mr. Rahat Hossain, Finance Director at Zenith
To : Mr. Ahsan Habib FCA, Partner of AHC
Subject : Reporting and Compliance issues.
Date : 19 July 2022

Dear Mr. Habib,

Congratulations on your reappointment for the advisory services to the company. I am writing today for your advice on some issues we have been facing. Our current year audit is on-going. Our auditor has completed their audit and raised some issues which need to be incorporated in the draft financial statements in **EXHIBIT-3**. We need your assistance to make corrections in our draft financial statements.

Recognition of biological assets: During the year, 20 calves were born at our dairy firm. We are planning for rearing these calves until they mature. We will use the bulls for meat and cows for dairy productions. As these calves were born at our firm, there was no cost associated to acquire them. We have considered that average cost of the cattle has decreased but total value of the cattle remained same. Accordingly, no accounting entry has been passed. Each of these calves could be sold to other livestock firms at BDT 15,000 immediately after born. However, as we raised the calves till year end, each of which now could be sold at BDT 25,000. However, it will incur total selling cost of BDT 25,000. Management estimated that fair value of all other biological assets reported in the financial statements was BDT 22,479,045 as of the reporting date. Our management expects to incur cost 1% of fair value to sell these biological assets. Management is seeking your advice regarding required adjustments (if any) to comply with **IAS 41-Agriculture** of the International Financial Reporting Standards (IFRS).

Government Grant: During the year Zenith was awarded with cash reward of BDT 1,000,000 from government for its contribution in Fish Farming. Reward amount will be received next month. We have not considered the government grant while preparing the financial statements. Similarly, Zenith is expecting to receive incentives at rate of 20% on the exported revenue of 10,000,000 in 2022. The export incentives are paid after realization of export proceeds and carrying out due diligence by the authorized dealer and the central bank. The company has not accounted the same as the said incentives has not been received within 30th June 2022. Management is seeking your advice regarding compliance with **IAS 20-Government Grants** of the International Financial Reporting Standards (IFRS).

Interest free loan: At the beginning of the year, we have installed several solar panels to generate power and electricity in Zenith premises. This has been installed with support from IDCOL which is government owned specialized non-bank financial institution for financing renewable infrastructure. IDCOL have lent BDT 2,500,000 for five years without any interest. Loan needs to be repaid at 500,000 Taka per year. Management booked this as short-term Borrowings. Your advice is solicited on compliance of IAS 1 and IFRS 9 of the International Financial Reporting Standards (IFRS).

Employee benefits: Zenith have 60 permanent workers who works on the vegetable fields, fish and dairy firm. These workers are given daily wages of BDT 200 (equivalent to 3.27 kilo of rice at taka 60 per kilo) as per The Agricultural Labor (Minimum Wages) Ordinance, 1984. But they are paid on monthly basis for 25 days they usually work in a month. No overtime or post-employment benefit is not given as nothing is mentioned in the above-mentioned law. However, we have been informed that as per the Labor Law, 2006, overtime at double of wage rate and gratuity is payable to these workers. All of these workers are with Zenith for average of 3 years. On an average, they work for 300 days in a year. They have to work 2 hours in excess of regular 8 working hours for 5 days per month on an average. They are paid two festival bonuses on basic wages which is assumed to 60% of monthly wages. Apart from these 60 workers, other employees are paid with overtime and post-employment benefits as per The Labor Law 2006.

E-Mail from Operations Director of Zenith Agro Business Ltd.

From : Mr. Anika Chowdhury, Operations Director, Zenith
To : Mr. Ahsan Habib FCA, Partner of AHC
Subject : Advice regarding investment options available and finding suitable financing alternatives.
Date : 20 July 2022

Dear Mr. Habib,

We are currently considering following strategic options to implement where we need your input. Board of Zenith is now considering two options. First one is to build a biogas plant, and another is to expand the fish farm. Board is expecting your advice on the on evaluation of investment and financing options independently.

Strategic Options under consideration.

Board requires that, for apprising the investment options, the discount rate be determined considering applying Capital Asset Pricing Model (CAPM). We have been informed that the Bangladesh 10 Years Government Bond has an 7% yield which is considered risk free. The expected beta (β) for Zenith is 1.2. Beta measures the volatility of a security compared to market risk as a whole. The average expected market return from the investments in securities similar to Zenith (comprising of dividend and capital gain yield) is 12% per annum.

Investment option 1:

Zenith management has been looking for opportunities to address challenges with cattle waste. Zenith already faced warning from local authority to remove these cattle waste. this issue. Last month our company chairman Mr. Zaved visited a renewable energy convention where he learnt about generation of biogas from cattle waste that can be used for cooking and fuel for running vehicle. In our last board meeting, this issue was discussed, and board expressed their interest to explore the feasibility of setting up a biogas plant for Zenith.

Major cost related to biogas plant is cost of land and inputs for biogas. Fortunately, we have both readily available without incurring any cost. However, it has been estimated that industrial scale Biogas plant will cost around BDT 70,000,000. Furthermore, civil works and mechanical works to set up the plant will incur cost of BDT 30,000,000. Plant will generate biogas which will be stored in a balloon having capacity of 1200 cubic meter. Plant is expected to generate 1100 liter of biogas per day. This can be filled in 110 vehicles (approx. 10-liter gas per vehicle) though gas station. Alternatively, this can be sold as LPG gas to local households. Management expects to sell full production of gas at 50 Taka per liter either to vehicles or to households. Plant is expected to have a life cycle of 10 years if maintained regularly. Management estimates that maintenance cost of the plant will be BDT 25,000 per month.

Investment option 2:

Alternatively, board has option to expand fish farming by building an integrated Cattle-cum-fish culture which will also include setting up own hatchery and feed productions. As Zenith has received cash award for fish farming, management is thinking about the option to expand fish production. Management estimates that, Zenith will require BDT 80,000,000 to build infrastructure for hatchery and feed production and another BDT 20,000,000 for developing integrated fish farming, setting up house for fish fries, testing production of feed products and related regulatory expenses. Management believes that this infrastructure will have 15 years of useful life. It will be able to generate revenue of BDT 20,000,000 and will incur cost of 9,000,000 per year.

Determining the financing options.

Zenith management forecasts that it can manage finance for 100,000,000 which will be required for financing selected the project from the above two investment options. Board is discussed about following two financing options but could not reach to conclusion which will incur lesser cost of finance.

Option 1: Financing through bank loan

The management consulted with the existing bankers to get a SME bank loan for the 100,000,000 at the interest rate of 8.5 percent per annum. Repayment of bank loan has to be made in equal yearly instalment in 10 years. However, 1% delinquent charge over offered interest rate will be added on the overdue installments, if there is any. The Company thinks it will be more appropriate to consider the delayed payment in calculation in view of its liquidity constraints. Bank also will charge commitment fee at 0.5% on un-availed loan balance, if any.

As part of the loan terms and conditions, bank will nominate two of their representatives in the Board. Each of these representatives will be paid board meeting attendance fee at BDT 10,000 per meeting. Zenith shall have to hold quarterly board meeting and submit quarterly financial statements including cash flows both direct and indirect method. Further, personal guaranty of shareholder directors will be required for availing the loan to the lender. If company incur loss, shareholders will have to pay outstanding interest and installment from their own source. Bank also requested a 'No Objection Certificate (NOC)' from the existing lenders regarding creating its priority charge over the assets of the company. If NOC cannot be provided to the bank, additional 2% 'risk premium' will be applicable on the outstanding loan amount. Zenith requested NOC from existing lenders but they refused to issue the same for creating the priority charge over the assets of the company.

Option 2: Qualified Investor Offer (QIO) of Shares

Small and medium enterprises (SMEs) can now raise funds from the capital market as part of a strategic partnership between SME Foundation and the Dhaka Stock Exchange (DSE). As per the rules, the SMEs will be allowed to collect a maximum of Tk 300 million from the stock market, officials concerned have said. It will be listed with the Stock Exchanges and raise capital through the Qualified Investor Offer (QIO) (*Source: The Daily Sun, 07 Sep 2021*).

The company expects to raise fund through QIO in 2022 at 60% premium subject to approval of Bangladesh Securities & Exchange Commission (BSEC). BSEC consider the NAV, EPS and sectoral Market PE ratio, etc. while approving the premium rate. The market capitalization of all securities listed in DSE Ltd. as on February 2022 was Tk. 5,439,922 million and market P/E Ratio for all listed securities is 16.15, whereas sectoral Market Capitalization was Tk. 254,024 million and sector's Price earnings (P/E) ratio was 23.18. Market price and EPSs of other comparable companies of the sector were as follows:

SL	Company	Face Value (BDT)	NAV (BDT) Dec 2021	Market Price (6-month average till Dec 2021) (BDT)	EPS on Dec 2021 (BDT)
1.	Index Agro Industries Limited	10	22.68	35	2.63
2.	Agricultural Marketing Company Ltd.	10	20.25	28	2.37
3.	Golden Harvest Agro Industries Ltd.	10	8.07	12	0.11
4.	Rangpur Dairy & Food Products Ltd.	10	15.30	18	0.64
5.	Rahima Food Corporation Limited	10	7.18	7	0.07

Zenith is planning to raise 100,000,000 by offering 62,50,000 shares. Entire proceed for QIO will be used for financing the selected investment project. During initial 5 years, no new bank loan can be availed without the consent of new shareholders and the BSEC. If additional fund is required for expansion or selection of new project, fund must be raised through right share at face value during this period.

Board is not sure whether expected 60% premium is justifiable to get BSEC's approval. DSE Listing Rules require that the listed company shall follow BSEC code of corporate governance which includes submission of quarterly financial statements and induction of at least one or one fifth of the board as independent directors. Further, board need to introduce different committees including an audit committee headed by an independent director. The independent director shall be entitled to receive board attendance fee for participating in the board and committee meetings at the rate of Tk. 10,000 per meeting. Usually, board and audit committee meetings are mandatory before submission of quarterly and annual financial statements.

Table for Present Value Interest Factor Schedule

Year / Rate	1	2	3	4	5	6	7	8	9	10
9%	0.9174	0.8417	0.7722	0.7084	0.6499	0.5963	0.5470	0.5019	0.4604	0.4224
10%	0.9091	0.8264	0.7513	0.6830	0.6209	0.5645	0.5132	0.4665	0.4241	0.3855
11%	0.9009	0.8116	0.7312	0.6587	0.5935	0.5346	0.4817	0.4339	0.3909	0.3522
12%	0.8929	0.7972	0.7118	0.6355	0.5674	0.5066	0.4523	0.4039	0.3606	0.3220
13%	0.8850	0.7831	0.6931	0.6133	0.5428	0.4803	0.4251	0.3762	0.3329	0.2946
14%	0.8772	0.7695	0.6750	0.5921	0.5194	0.4556	0.3996	0.3506	0.3075	0.2697
15%	0.8696	0.7561	0.6575	0.5718	0.4972	0.4323	0.3759	0.3269	0.2843	0.2472
16%	0.8621	0.7432	0.6407	0.5523	0.4761	0.4104	0.3538	0.3050	0.2630	0.2267
17%	0.8547	0.7305	0.6244	0.5337	0.4561	0.3898	0.3332	0.2848	0.2434	0.2080
18%	0.8475	0.7182	0.6086	0.5158	0.4371	0.3704	0.3139	0.2660	0.2255	0.1911

Environmental, Health and Ethical Issues at Zenith Agro Business Ltd.

Although Zenith prefer uses of organic manure, but still depends on chemical fertilizers and pesticides to increase and secure production. This not only cause health issues but also deteriorate soil conditions and kill native species, like the honeybees that helps in pollination. Growing foods and raising livestock are one side of a coin where selling is other side. Zenith often resorts to enticing to super shop officials to buy more or to ensure preference to zenith produces over other agro business or farms.

In dairy operation, calves are artificially fed depriving them from suckling from the mother cows and mother cows are milked 100% for human consumption. Cattle farmers specifically breed dairy cows to produce large quantities of milk. To keep the production of milk constant, a cow has to continue lactating. This is ensured by impregnating the cow every year via artificial insemination to ensure genetically superior and profitable offspring.

Calves who are capable of future dairy production undergo the same cycle as their mothers. Beef cattle like bulls and calves raised for meat. Cows that not required for milk production or decreases productivities, are also slaughtered for meat.

Cows need to be handled in a way that prevents stress or injury to them, and that ensures their overall well-being. However, in Zenith dairy, only a small percentage are given access to meadow. Cows are stationed on concrete floors for a long period, damaging their hooves and causing sore joints.

Living a life of confinement, dairy and beef cattle are kept in unsanitary conditions, amidst their own feces, and are forced to inhale toxic fumes. Furthermore, as cows are milked using machines, which among other things cause mastitis, leading to pus formation in milk.

Cattle farming is one of the largest contributors to greenhouse gases, thus being a major cause of climate change. Cattle waste contains a lot of nitrogen and ammonia, which can contaminate water sources around farms over time. The cattle are injected antibiotics to ensure their good health which recycles into human body through meat consumptions causing consumers resistant to antibiotics.

Zenith disposes the cattle wastage in open land which causing air and water pollution. It is causing difficulties for nearby people to live in with bad smell. There has been objection filled to local authority against Zenith. Zenith bribed staffs at local council for not taking any action. Zenith also argued that it is opening up job opportunities for the locality and paying taxes to the local authority. Hence, its operation is valid.

For its use in vegetable field, Zenith purchased a new kind of fertilizers which accelerates the growth of vegetables. During the year a government inspector visited Zenith's premises and concluded that these fertilizers cause pollution to the environment. Accordingly, Zenith was fined for BDT 200,000 as per Fertilizer Management Act 2006. Zenith has booked the penalty in operating expenses to hide the payment of penalty and disclosure in the financial statements.

News Clips regarding Agro Business and Dairy industry in Bangladesh**Bangladesh now plans large-scale meat export**

24 August 2019 on The Daily Independent

Once highly dependent on Indian cattle for meeting the huge demand of sacrificial animals during Eid-ul-Azha, Bangladesh is now planning a large-scale export of cattle meat as local farms have staged a ‘quiet revolution’ in animal husbandry. Officials at the Department of Livestock Services (DLS) said they have taken various steps to boost the cattle meat export since the country’s number of surplus cattle has been growing significantly over the last few years with over 10 Lakh this year alone.

Bangladesh now exports cattle meats on a very small-scale by two farms—Bengal Meat and Deshi Meat. One of the drawbacks to boost our export is restricted area declared as free from hand-foot-and-mouth (HFMD) diseases. Government is now going to declare four new districts—Sirajganj, Pabna, Manikganj and Bhola—free from the disease through mass vaccination and other activities to boost the export.

Agro-Tech Startups in Bangladesh: Tech Revolution in Agriculture Sector

12 Oct 2021 on UNB News

Bangladesh has always been an agricultural country. Agriculture is still the largest sector when it comes to employment with over 42.7% of labor related to agriculture. The sector accounts for nearly 12% of GDP share. Yet traditionality has always preceded innovation in this sector. However, recently some steps have been taken to modernize the existing agricultural system in the country by few start-up companies. While some companies are focusing on specialized needs, others are taking a more holistic approach. Agri-Tech is slowly gaining traction in Bangladesh. As a result, there is a huge opportunity to merge the tech industry with the agricultural society. Value addition of these start-up companies are already visible. It is only a matter of time that these start-up companies expand more on their respective fields.

Why Bangladesh agriculture loses out to productivity?

23 February 2022 on The Business Standard

The country has always enjoyed success in introducing new varieties of more resilient crops, while shifting focus towards agriculture mechanization, seed production and breeding. But the impacts of climate change have left Bangladesh lagging other countries in terms of productivity and the younger generation are reluctant to enter the field of agriculture. While the sector has kept pace with economic growth, the country still has to import around 10 million tons of food.

Currently most of the people working in agriculture are above 50 years of age. The new generation is not coming to the sector. In 2000, our farm labor was 80% of the population. This has now dropped to 40%. By 2030, it will drop to 27%. Huge employment in the garment sector, service industry and other business ventures and opportunities of overseas employment have resulted into this. Apart from this, soil temperature has risen in the last 5-6 years due to climate change. As a result, the fertility of the land is declining. Agricultural land is declining sharply due to housing projects and industrialization,

Govt. will provide all-out support to agribusiness investors

29 Nov 2021 on The Daily Star

The government will extend all-out support to the agribusiness investors and entrepreneurs, and they will be provided with all sorts of stimulus packages, Agriculture Minister Muhammad Abdur Razzaque said today. at an international seminar organized by Bangladesh Investment Development Authority (BIDA). He mentioned that government want to increase the earnings of farmers and general people. That is why it is necessary to increase the export of fresh and processed agricultural products of the country in the international market as well as expand the market within the country by processing.

The need and prospect of promoting biogas in the country

29 Sep 2021 on The Financial Express

Bangladesh remains far behind its neighboring countries in developing biogas as an alternative to conventional fuel. Its widespread use can reduce dependency on natural gas and firewood, saving forests and increasing soil fertility. Poor people can save their hard-earned money by using biogas as they need not purchase firewood for cooking or kerosene for lighting. Cattle dung, human excreta, poultry droppings and garbage are processed in the biogas plants under an aerobic condition to produce biogas.

Russia-Ukraine war could push fuel prices even higher

29 Sep 2021 on The Financial Express

Russia's invasion of Ukraine fueled a spike in oil prices worldwide and stoked fears of major disruptions to the global energy supply. Sanctions imposed on Russia over the invasion had disrupted oil supplies and driven oil prices to nearly \$140 a barrel, its highest in about 14 years. Countries like Bangladesh, which are heavily reliant on imports, are feeling the heat of the high fuel prices in the international market. The cost of transportation and insurance is also expected to rise if the war between the countries continues. To reduce the country's dependency on imported fossil fuels, experts are suggesting diversifying the sources and uses of renewable and alternative energy by increasing production and supply of energy from windmill, solar, biogas etc.

Biogas for road vehicles: Technology brief

Research project by International Renewable Energy Agency (IRENA)

Switching to biogas as vehicle fuel can reduce greenhouse gas emissions in the transport sector between 60% and 80% compared to fossil-based fuels like gasoline and diesel. This brief highlights the technologies available – both established and newly emerging – for biogas production and biogas-driven vehicle fleets. It evaluates costs, performance and sustainability and outlines the best practices from around the globe to accelerate uptake of this key renewable transport fuel. When sufficiently purified, it can be used in place of fossil-based gas to drive natural gas vehicles (NGVs) or dual-fuel vehicles.

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