REQUEST FOR PROPOSAL

VOLUME I

PROJECT INFORMATION MEMORANDUM (PIM)

Development of Cold Storage at Kudra, DistKaimur, Bihar on RDFOT (Renovate, Design, Finance, Operate and Transfer) basis under PPP mode for Bihar Rajya Beej Nigam Limited

ISSUED BY :-

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1. Background and Brief on the Project

1.1 Infrastructure Development Authority (IDA) is the Nodal Agency for the Public-Private Partnership Projects in Bihar constituted under the Bihar State Infrastructure Development Enabling Act, 2006 for rapid development of physical and social infrastructure and to attract private sector participation in designing, financing, construction, operation and maintenance of Infrastructure Projects in the State. Bihar Rajya Beej Nigam Ltd (BRBN),a Public Limited Company under the Department of Agriculture, Govt of Bihar has mandated IDA to conduct and manage the overall Bid Process for selection of Developer on its behalf.

1.2 Bihar Rajya Beej Nigam Ltd (BRBN) a Public Limited Company was incorporated on July, 18 1978 under the Second National Seed Project established under the Companies Act 1956 by the Govt of India with financial assistance of the World Bankto bring about complete self-sufficiency and self reliance to meet the full active demand of quality seeds of high yielding varieties to the farmer of the State at reasonable price.

1.3 In the year 1980, the BRBN proposed to set up a cold storage of 9000 MT capacity on land admeasuring 245,143square feet at Kudra(District : Kaimur) to cater to the storage need of surplus Potatoes in Kudra Region. The work for civil construction was started in late 1983 and about 80% of the planned civil construction and electrical works for thecold storage was completed in 1985 but due to some unavoidable reasons they were unable to complete the further development work required for the Projectto make it operational. The details of existing infrastructure are given below in the table:

S.No	Particulars	Unit
1.	Land for utilities and other related work	1 acre
2.	Constructed Area	a. Cold Storage - 40,606 sq ft b. Pine Room and Generator – 4,210 sqft
3.	Building& Civil Works	5 storied building, having 40 chambers Capacity – 9000 MT
4.	Electrical Works	100 kVA power sub-station
5.	Miscellaneous Items	Few misc items utility of which will be handed over to the successful bidder on ‘as is, where is’ basis.
6.	Cold Storage	To be CA / MA type cold storage

1.4 Presently BRBN is keen to explore the possibility of setting up a Controlled Atmosphere Cold Storage on that above mentioned facility. It will not only utilize the existing assets mentioned above but willalso cater tothe long pending need of cold storage in that region. For that purpose BRBN has mandated IDA to manage the bid process and assist it in selection of a private developer who shall be responsible for developing the project.

1.5 Bihar Rajya Beej Nigam Ltd (BRBN) (the "Authority")has decidedto"Develop the Cold Storage at Kudra, DistKaimur, Biharon RDFOT (Renovate, Design, Build Finance, Operateand Transfer) basis under PPP mode (the "Project") wherein the private player herein after called the "Concessionaire" is responsible for renovation of existing facilities, financing, procurement of machinery, commissioning, operation & maintenancefor the defined concession period i.e. 30 years.The Concessionaire will be responsible for renovation of the existing assets, construction, procurement, and installation of machineries and commissioning of plant under the purview of the project as per specifications and agreement set forth with BRBN.The private player shall be entitled to receive revenues generated from the projectfacility.

1.6 The operationalized cold storage shall be Controlled Atmosphere and Modified Atmosphere type while adhering to the latest guidelines and specification issued by Mission for Integrated Development of Horticulture (MIDH), published in March 2010 with all latest amendments.

1.7 The existing cold storage is a 5 storied structure having 40 chambers in total i.e. 8 chambers per floor. Each floor is divided in two wings having four chambers each. Each wing can be controlled for temperature and humidity separately.

1.8 A contract was also awarded (by tendering process) for supplying of machineries and equipments for cold storage; few machineries were procured. The cold storage has its own transformer and electricity connection. However, the cold storage could not become operational till date.

1.9 BRBN shall provide the land, buildings, plant and machinery and other physical infrastructure whatever is present at the site of existing Cold Storage to the Selected developerfor development of the "Project" for a predefined concession period of 30 years on 'as is, where is, whatever there is' basis and the private operator would be required to develop the controlled atmosphere cold storage of minimum capacity of 9000 MT and required to hand over capacity of 900 MT from the 9000 MT to the BBRN

for their usage. Therefore the private developer shall be entitled for the revenues generated from the 8100 MT.

1.10 After the end of Concession Period the Concessionaire shall transfer the Project Facility/ Assets to BRBN in working condition as per terms and conditions of the Concession Agreement signed. In lieu of the above concession the private operator shall pay Annual Premium to BRBN Ltd.

1.11 The Private Party shall make a detailed project proposal and project cost estimate (the capital cost of the project excluding cost of land should be supported by documentary evidence and certified by chartered engineers and chattered accountants).

1.12 The bid parameter is the highest annual premium/yearly concession fee quoted by the private bidder. The 1st Years Annual Premium/yearly concession fee quoted in Indian Rupees shall be increased by 15% after every 3 years. The Private Developer shall also provide900 MT cold storage facilities from the total capacity of 9000 MT to BRBN at no cost to BRBN for the entire concession period. BRBNshall be free to utilize the said storage space as it deems fit at its discretion.

1.13 The objective of the RFPfloated by IDA on behalf of BRBNis to successfully select the Private Developer for implementation of the project through single stage bidding process.

1.14 The single stage bidding process comprises of single stage two envelop bidding process comprises of Technical Proposal and Financial Proposal. The bidders shall submit the Technical Proposal and Financial Proposal in separate envelope. The Financial Proposal of those bidders will be opened who will be able to qualify the technical eligibility criteria.

1.15 The preferred bidder shall form the SPV and sign the concession agreement with the BRBN for development of the “Project” per the stipulated conditions of the bid documents.

1.16 The scope of the private developer shall mean renovate the existing structure, design, build the required facilities, finance, procure required machineries, installation and commissioning, operate andmaintain the “Project” upon Site for the defined concession period i.e. 30 years as per Good Industry Practice.The cold storage shall be of Controlled Atmosphere and Modified Atmosphere type. After completion of the concession period

i.e. 30 years, the private developer shall transfer the Project/Project Facility to the BRBN (the Authority") as per the conditions of RFP document.

1.17 The indicative details of the project are given in the table below:

Name of the project	Project Output Requirement	Selected Developer Minimum Obligation	Maximum Indicative Land Area	Estimated Project Cost (Rs. crore)
Development of Cold Storage at Kudra, DistKaimur, Bihar on RDFOT (Renovate, Design, Finance, Operate and Transfer) basis under PPP mode	Making the existing facility as operational with CA / MA type Cold Storage having minimum capacity of 9000 MT. The Concessionaire will be responsible for required construction, renovation, upgradation work; procurement, installation and commissioning ofrequiredmachineries and equipments. The Concessionaire shall operate and maintain the facility for the defined Concession Period and transfer the existing facility to BRBN upon expiry of the Concession Period.	1) Shall provide 900 MT storage space to the BRBN free of cost. 2) Highest annualpremium	About 2 acres including the constructed architectures	12.00

Note: The Project Information Memorandum (PIM) is being issued to bidders as Volume I of the Request for proposal (RFP) document and must be read in conjunction with the other volumes of the RFP as given below

Volume - II: Instruction to Bidders (ITB)

Volume - III: Draft Concession Agreement (DCA)

2. Controlled Atmosphere and Modified Atmosphere Cold Storage

Cold Storage is a special kind of room, the temperature of, which is kept very low with the help of machines and precision instruments. . Across India, production level of fruits and vegetables is more than 100 million MT and keeping in view the growth rate of population and demand, the production of perishable commodities is increasing every year. The cold storage facilities are the prime infrastructural component for such perishable commodities. Besides the role of

stabilizing market prices and evenly distributing both on demand basis and time basis, the cold storage industry renders other advantages and benefits to both the farmers and the consumers. The farmers get opportunity of producing cash crops to get remunerative prices. The consumers get the supply of perishable commodities with lower fluctuation of prices. Commercially apples, potatoes, oranges are stored on large scale in the cold storages. Other important costly raw materials like dry fruits, chemicals, essences and processed foods like fruit juice/pulp, concentrate dairy products, frozen meat, fish and eggs are being stored in cold storages to regulate marketing channels of these products.

Controlled Atmosphere (CA) storage uses oxygen and carbon dioxide concentrations of about 1% to 5% for each gas in most applications. Normal room air has Oxygen concentration of about 21% and Carbon Di-oxide levels near 0.03%. Low Oxygen and high Carbon Di-oxide levels slow the ripening process, stop the development of some storage disorders such as scald in apples, and slows the growth of decay organisms. All of these effects increase storage life of fresh produce compared with conventional refrigerated stores. These facilities are recommended for long term storage of fruits and vegetables like Apples, Pears, kiwi, cabbage etc. for up to 10 months.

In CA stores produce is stored in large bins which are stackable up to 11 high (total chamber height up to 10 m) or in PVC crates which can be stacked in mild steel pallet frames up to 4 levels high (chamber height up to8 m). Storage in CFB box may also be resorted to for short duration storage of fruits like strawberry. The refrigeration system is designed to maintain temperature of -1degree centigrade with humidity of 90%- 95% RH.

The critical aspects related to CA / MA Cold storage shall be as per specifications and guidelines "Technical Standard Number NHB – CS – Type 03-2010" as issued by Technical Standard Committee on Technical Standards and Protocol for the Cold Chain in India, and as modified from time to time.

3. Rationale of Development of Cold Storage

India is the largest producer of fruits and vegetables in the world scenario but the availability of fruits and vegetables per capita is significantly low because of Post Harvest loses which account for about 25% to 30% of production. The fruits have also limited life after harvest; the quality of sizeable quantity of produces also deteriorates the moment it reaches the consumer. Post Harvest cooling rapidly removes field heat, reduces respiratory - activity, reduce internal water, wilting, slow the growth of micro organism and reduces the production of natural ripening agent i.e. ethylene.

The lack of cold storage / cold room facilities is one of the main bottlenecks in tapping the potential. In the state of Bihar the availability of operating cold storage facilities are very less. Introduction of cold storage/cold chain facilities in the State can prove to be a boon for the horticulture farmers. Introduction of Cold storage / Cold room facility will help them in removing the risk of distress sale and simultaneously will ensure better returns.

Post Harvest cooling also provides marketing flexibility by allowing the grower to sell produce at the most appropriate time. Unavailability cooling and storage facilities makes it necessary to market the produce immediately after harvest and may result in distress sale. This can be an advantageous to growers who supply products to restaurants and grocery stores or to small growers who wait to assemble truck load for transportation to other places. Post Harvest cooling can be an effective tool to deliver highest qualitative produce to the consumer. Intervention through Post Harvest cooling will help the farmers to store their produces and market them at the opportune time.

During the peak harvesting season, excess produce gets over flooded and many a times due to lack of storage facilities, gets damaged and totally wasted, whereas an artificial scarcity gets developed during non-harvesting periods with prices soaring and many times, we have to import these goods at very high prices. Cold storage is used to reserve quality of fruits & vegetables and other goods. Once kept in the cold storage, they do not degrade for defined periods of time and can serve as a buffer stock for that period balancing out price fluctuations and demand supply gaps. This advantage was recognized and the development of cold storage industry has therefore an important role to play in reducing the wastages of the perishable commodities and in turn providing remunerative prices to the farmers.

Over a period of last 10-15 years a significant progress in the expansion of the cold storage industry in the country has been made but considering the increased demand and a total cold storage capacity required, there is still a wide gap between production and cold storage capacity, which this results in huge losses to farmers and the country. Steps are being taken to improve the infrastructure as well as to build additional cold storage capacity by giving subsidies and tax concessions. A large number of cold storages have come up with heavy subsidies, loans and help from the cooperatives and the Government. The old ones have been revamped, generators added to take care of power cuts and the availability of foods by storages / cold storages are on the increase. Reliable Refrigeration machinery and plants are indigenously manufactured and expertise has developed which is also playing a leading role in the export of fruits / vegetables / meat / flowers etc as well. Currently, India has approximately

6,500 cold storages in the country, the bulk of which is single commodity and built in induced clusters.

In Bihar majority of population depends on Agriculture. Upliftment of such categories can improve the overall status of the state. Compared to the developed states of our country, the economic condition of farmers of Bihar is weak. Currently, most of the cold storage capacity in the state is being used for the storage of potato. Looking at the high horticulture production in the state, existing capacity is inadequate and newer capacity needs to be created to cope up with the production levels. Also the average size of land holding in Bihar is 0.75 hectare in comparison to national average of 1.57 hectare. Small and marginal farms constitute about 91 per cent of the total land holdings which has affected the viability of agriculture. Along with this there are other constraints in terms of high input costs, unavailability of credit and highly inefficient marketing channels. In this scenario, farmers are selling produce to the village level intermediaries. The inability of the farmers to store the produce for a long duration often results in distress sales. Similarly large production of horticultural crops and its marketable surplus requires cold storage infrastructure so as reduce post harvest losses.

The growth of physical infrastructure for the agricultural markets is pertinent as the state has a large production of fruits and vegetables. The amount of post harvest losses of the agricultural commodities particularly for the perishable commodities accentuates the need of having suitable cold storage facilities. Bihar government has also in place policies to develop facilities for post harvest management including packaging, grading, transportation, curing, ripening and storage.

Requirement of Cold Storage in the state as well as in the Kaimur district is high. There is only one operational cold storage in Kaimur district. Moreover, most of the existing cold storages in the state store only Potatoes. There is dearth of cold storages for other agricultural produces. The proposed cold storage can be utilized to store various fruits, vegetables, spices, pulses and milk products. Moreover, with entry of many large retail players, the utilization of the cold storage is expected to remain high.

The Project Developer will have full autonomy in type of products that it shall store in the cold storage while following the land of the law (i.e. can't store contraband or illegal items).

E.g. the cold storage can store the products like fruits, vegetables, milk products, spices, pulses, seeds etc. alongwith storing medicines. These operational flexibilities coupled with agricultural and horticultural produces increases the financial viability of the Project.

The proposed project is expected to result in creating state of the art cold storage facilities which shall result in improvement in the post harvesting as well as marketing channel of various products.

4. Development Guideline for Cold Storage

The proposed project is envisaged to be implemented under PPP mode in which the private developer / Concessionaire shall be responsible for renovation of existing facilities, financing, procurement of machinery, upgradation of the project, commissioning, operation & maintenance, charging user fee and marketing of the project for the defined concession period i.e. 30 yearsand handing over full and peaceful possession of the Project Assets to the BRBN Ltd at the end of the Concession Period, without any Encumbrance and/or liability and at value to the effect that the Concessionaire shall have no claim on the aforesaid Project Property.

The Concessionaire will be responsible for required construction, procurement and installation and commissioning of the various facilities under the purview of the project as per specifications and agreement set forth with BRBN.

The Project shall be developed as Controlled Atmosphere and Modified Atmosphere type Cold Storage while adhering to the latest guidelines and specification issued by Mission for Integrated Development of Horticulture (MIDH).

BRBN Ltd shall provide the land, facilities and machineries to the private developer / Concessionaire on 'as is, where is, whatever there is' basis.

The Concessionaire shall meet the minimum modernisation obligations while, renovating, redeveloping, and augmenting the project facilities:

a. The Concessionaire shall upgrade/renovate/modernise the existing cold storage structure; designing and constructing required ancillary facilities for making it operational; without major alteration of the existing structures. Not limited to the following -
    i. *Civil Construction and Mechanical Works like– lift chambers, plastering and distempering, pathways, roof waterproofing, construction joint treatment, installation of required machineries for refrigeration and insulation. Required up-gradation for ancillary activities;*
    ii. *Power Lifts – minimum 2, based on requirement upto 4 can be installed;*
    iii. *Construction of fencing / boundary walls;*
b. Selection of the Plant and Machinery for the CA type Cold Storage of the Project;
c. Complete the modernisation and related work to make the cold storage operational within 8 to 10months from the Appointed Date;
d. Operation and Maintenance of the Project Facilities in accordance with provision of this Agreement and as per the best Industry Practices applicable to the Cold Storage; as well as marketing of the project to the end users;
e. Any alteration/augmentation/modernization/ shall be carried out with prior approval from the Authority to be in line with the local building regulations, and other Applicable Laws;
f. The Property, and Project Assets under consideration shall be used only for providing cold storage / storage services and no harmful products / banned products shall be stored;

g. Create an adequate waste disposal system for management and disposal of the waste generated through the Project;
h. Maintain hygiene and quality standards and providing quality services;
i. Provide for adequate security and insurance and ensuring there is no damage or loss to Project Assets;
j. The Concessionaire shall be required to undertake all the necessary and ancillary work related to cold storage works like loading, unloading, curing, sorting, temperature and humidity control etc.
k. BRBN shall also utilize the cold storage facility for its own purpose like storage of seeds, pulsesetc in controlled environment. Concessionaire shall make available 900 MT of cold storage space (in controlled environment) to BRBN free of cost. BRBN shall have full liberty to utilize the said storage space (900 MT) as it deems fit at its discretion.
l. BRBN Ltd shall pay the Concessionaire based on the utilization of cold storage for its own purposes at prevailing market rate, over and above, 900 MT.
m. Charge Rental / Storage Fee from the users save and except (k) above
n. Provision of services, performance and fulfillment of all other obligations of the Concessionaire in accordance with the provisions of DCA and matters incidental thereto or necessary for performance of any or all obligations of the Concessionaire under DCA.

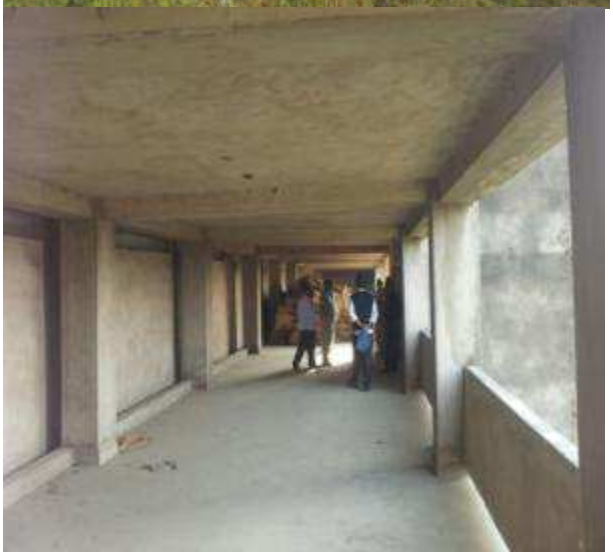
5. Siteand Project Location

The Kudra facility has access to wide four lane roads. The project facility shall be provided with broad pathway alongwith transit storage space and ample space for pre-storage activities like sorting, curing etc.

The distance of the site is approximately 200 Km from Patna and can be reached by travelling on NH – 30in about 3 to 3.5 hours. It is situated at important route which connects Patna – Varanasi – Delhi via road.

Kudra is also connected to rail route and nearest station is just about 1 km from the Project Facility.Electricity for the said project is available to the extent of more than 20 hours from the nearest grid of Pusauli.

Photo plate: Project Site



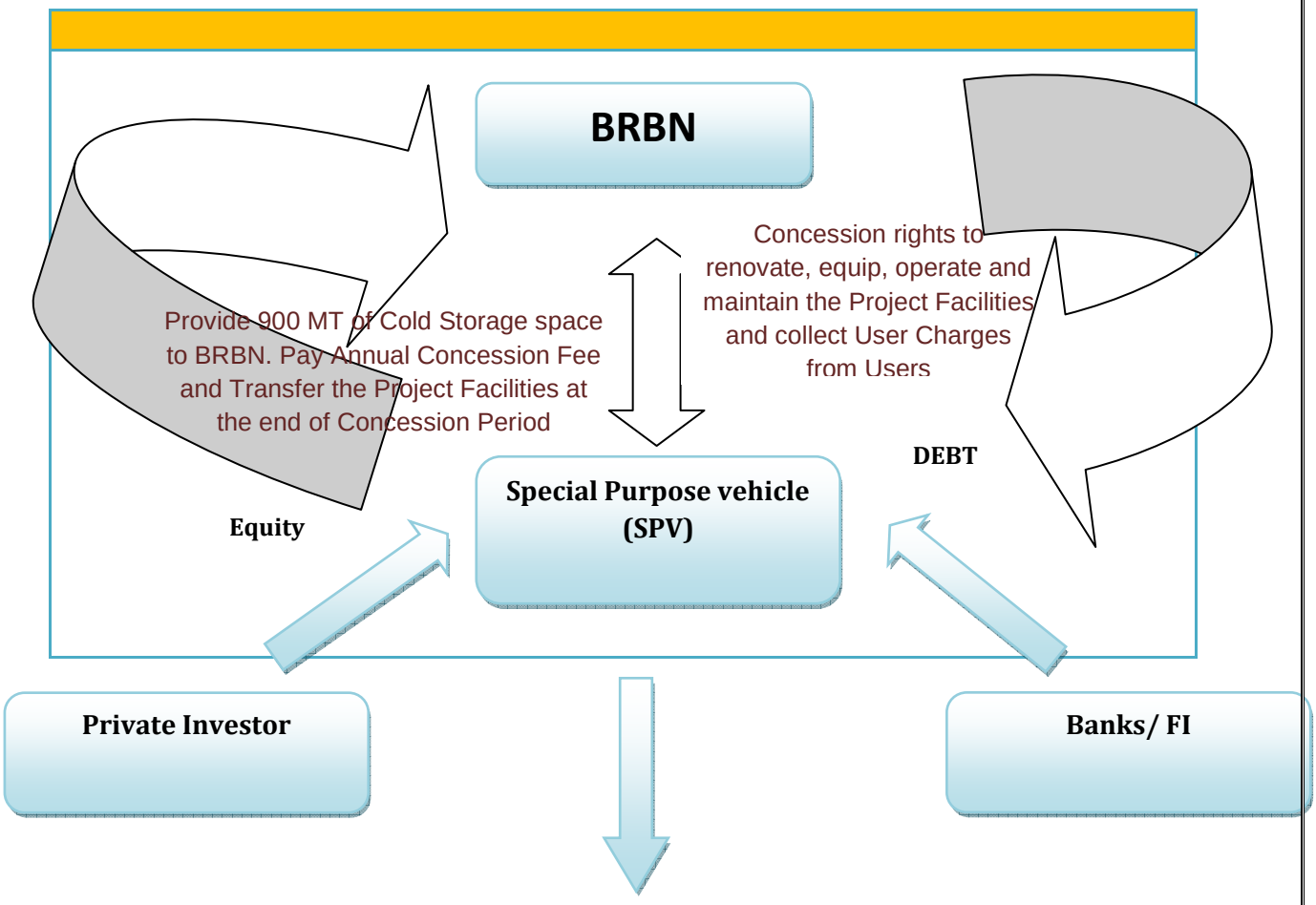
6. Proposed Project Implementation Structure

The Project Implementation structure is as detailed below: -

- The Project Developer / Concessionaire shall renovate of existing facilities, finance, procure machinery, upgrade of the project, commission, operate & maintain, manage and market the project.
- The Concessionaire will be responsible for required construction, procurement and installation and commissioning of the various facilities under the purview of the project as per specifications and agreement set forth with BRBN.
- In return the Project Developer gets the right from BRBN to collect revenue from the users / customers of the project facility.
- The Project Developer bears the cost associated with operational and maintenance of the facility as per standards agreed upon and collect revenue from users.
- BRBN shall receive Annual Concession fees (1st years Concession Payable shall be the Bid Parameter). The concession fees shall increase by 15% every 3 years as agreed and inked in the Concession Agreement.
- At the end of the concession period, the Project Developer shall transfer the Cold Storage alongwith all the assets to BRBN as per conditions of the agreement.

The flow chart below provides a representation of the above structure:

Flow Chart 1:



Renovate, Equip, Finance, OperateandManage the project till end of concession period and right to collect user charges from end user

THE PROJECT

Operation & Maintenance of Cold Storage at Kudra,DistKaimur, Bihar on RDFOT (Renovate, Design, Finance, Operate and Transfer) basis under PPP mode