

**PROJECT ON LOCALITY:SUSUNIA  
CHHATNA, BANKURA, WB**

**TOPIC:** Shushunia's Aquifer, Chhatna Block, Bankura District, West Bengal,  
India

**SUBMITTED BY:** Semester I (All Students)

**ACADEMIC YEARS:** 2022-23

**Date:** During December 2022



### Preface

Present work is a comprehensive and humble attempt to shape the Flash Flood of Bankura district. The objective of study is to understand the behaviour of river and its relationship of its inhabitants and how the people affected by the flash flood. The fact is that the study has two segments; first is to assess the behaviour of the river and the next is the socio economic aspects of river which are directly related to human being. It helps to access the actual nature of flood and drought of the area concern. It helps to access the psychological attitude that is the perception study of local people of the river basin area. All these are helps to accesses the attitude towards the surface runs off the people of this area concern.



## ACKNOWLEDGEMENT

We express the deep gratitude to our beloved Principal Madam, Dr. Malavika Sinha without her continuous encouragement this study could never have been possible. For numerous types of help, the author records her gratitude and thanks to:

- Teacher in Charge of Chhatna Chandidas Mahavidyalaya, Darapur, Bankura, PIN 722132
- All the members including the teachers and Personnel of Chhatna Chandidas Mahavidyalaya, Darapur, Bankura, PIN 722132
- Bankura District Library, Bankura District, West Bengal,
- Geology Department, Bankura District, West Bengal,
- ,
- All the villagers who help me to complete my survey

I am again thankful to all these persons and the institutions for their sincere help in this work.

Bankura

Santanu Khan  
2/07/23 Chhatna





# CHHATNA CHANDIDAS MAHAVIDYALAYA.

ESTD- 2007

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No: *Project/22-23*

Date *22/3/23*

## Certificate

This is to certify that *Santane Khom*, UID No. *21071202071* of Bankura University has successfully completed the Project on Environmental Studies (ACSHP104ECC-225) on PROJECT ON LOCALITY:SUSUNIA CHHATNA, BANKURA, WB the Academic Session 2022-23 under my guidance and surveillances.

*✓ Riya Pal 22/03/23*



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**INTRODUCTION**

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**Title: Shushunia's Aquifer, Chhatna Block, Bankura District, West Bengal, India**

The Shushunia hill appears like a porcupine peak. The Shushunia hill zone is an example of a contact spring. In the foothill zone, two perennial springs are observed. The study purely deals with its aquifer and water quality. Based on the present rock strata and the nature of the contact aquifer, its early condition has been assumed. The discharge of the confined aquifers occurs by leakage. The water temperature depicts the springs are not of geothermal origin. Shushunia's aquifer is the shallow flow system water table and it is the subdued replica of surface topography. The comparatively high discharge rate during post-monsoon indicates the fractured conduit-water seepage towards the aquifer. Moreover, twin-contact aquifers do not yield water uniformly. The water is slightly alkaline and hard.

**INTRODUCTION:** There are several small and large aquifers in the world. The plateau to undulating plateau-like landform and the occurrences of the aquifer is the most common association. Shushunia hill lies in the northwestern part of district Bankura, West Bengal, India (Fig.1). It (double peak) is a small hill surrounded by a plain (Fig.2 & 3).

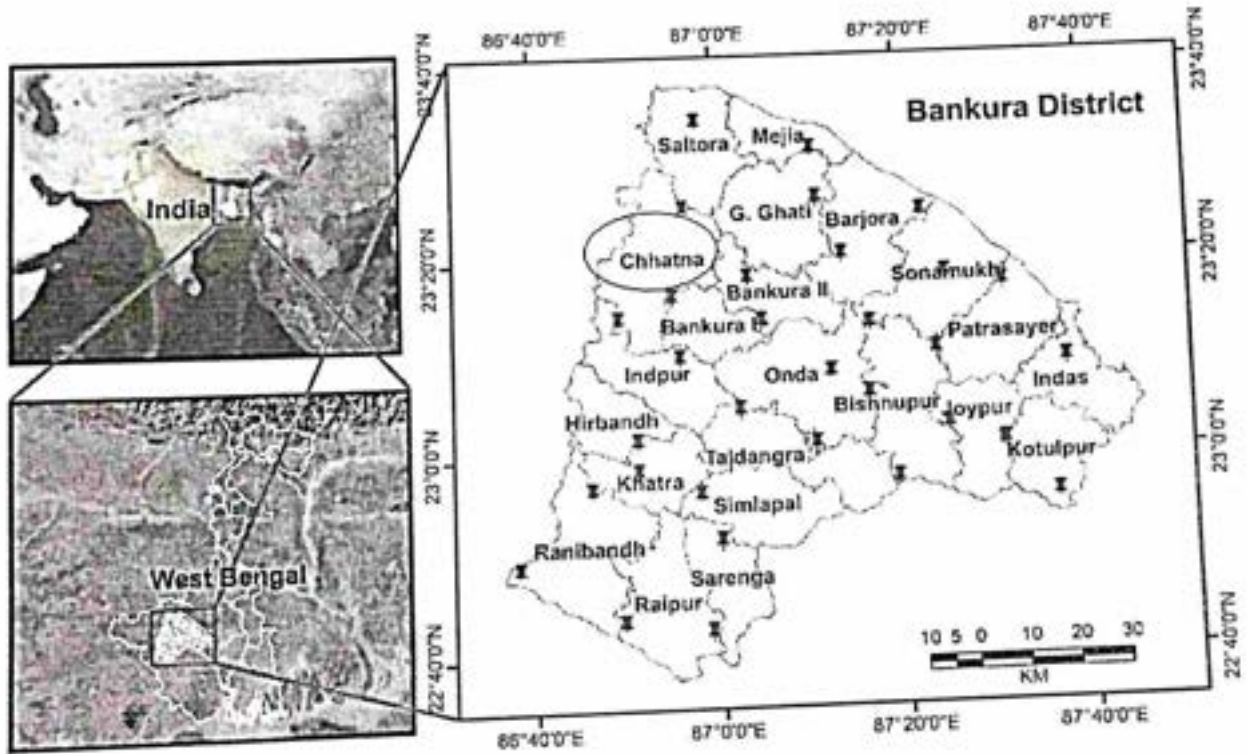
**OBJECTIVE:** Aim to study the Shushunia aquifer and its related geophysical attributes. It includes the location, landscape, rock strata, rock types of the aquifer, water yield by the aquifer, temperature, and hardness of the water. The study covers detail of surficial attributes, water discharge from the aquifer, and the position of twins aquifers. The aquifer lies in the sedimentary rock strata with semi-arid climatic conditions with alternative wet and extremely dry periods. Hence the study also tried to assess the water-yielding potentiality of the perennial aquifer.





**STUDY AREA:** The study helps to mitigate the water scarcity of the Chhatna block bankura. Basically the quifers yields the water that retained during the rainy season by the very permeable sandstone.

### Study Area



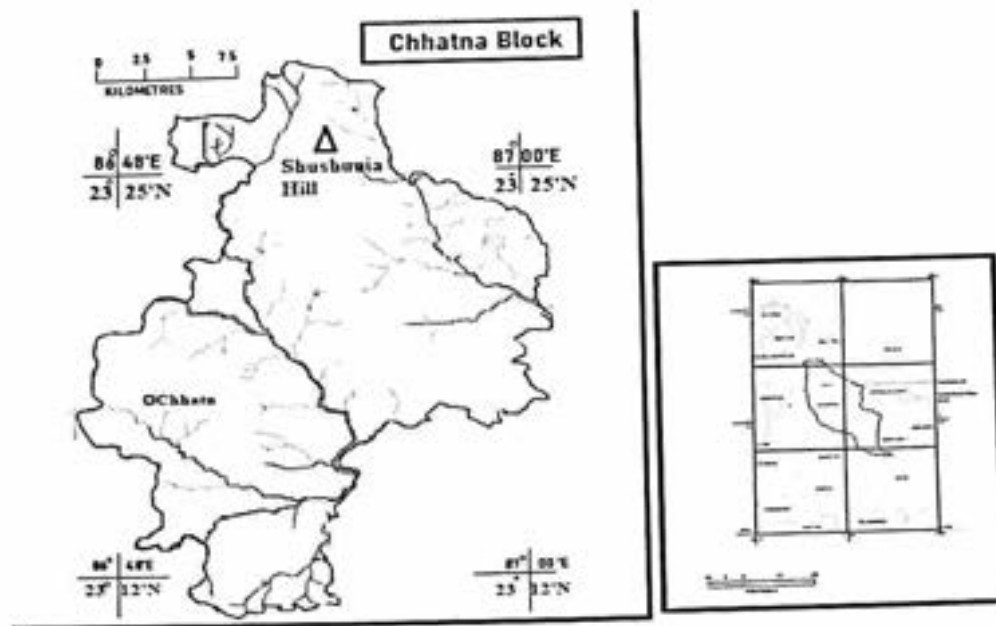


Figure No.1

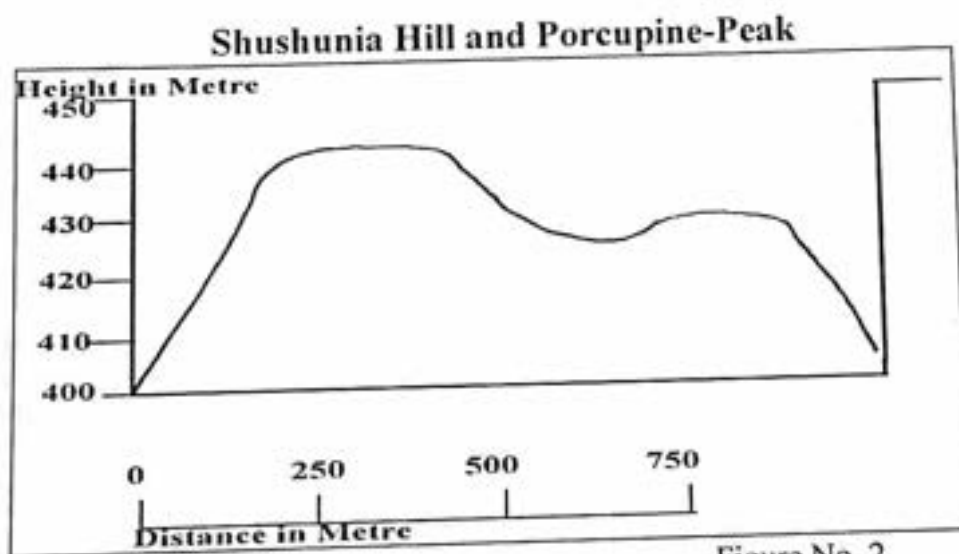


Figure No. 2

Shushunia is a small double peak-elongated-isolated hill (440m) (Fig.2 & 3). Its surrounding contour value varies from 100-110 m (Fig.2). Shushunia appears like a two-domical inselberg and it's a massive fractured rock structure (Mandal & Ray, 2009). The hill Shushunia (440m) is





abruptly high from its surrounding plain (Fig.2). It is just like an isolated hill of bedrock and it is standing conspicuously above the general level of the surrounding area (Fig 2).

**Shushunia and its Connotation:** The adjacent area of Shushunia hill is dominated by the Santhal and Munda communities. In *the Munda* language (Austic Language group, the main group is Indo-Austic), the word *Shushun* means a place where dancing and singing goes in hand in hand. According to the Santhali language, the word meaning of *Shun Shun* is nearby or side by side and *nia* means this. In the Munda language (dialect), the literal meaning of Shushunia is a place for a social gathering (accompanied by dance and song). According to the Santhali language, the word Shushunia means lying side by side. Twin peaks or porcupine-shaped peaks which lie side by side are described as Shushunia. Another word of the Santhali language is *Shur Shur*, which indicates the 'sound of whistling bird' and *nia* means 'this'. Therefore, Shushunia may have been derived from the Santhali language, meaning 'the place of whistling bird'.



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## LIST OF STUDENTS

Sl No	UID	STUDENTS NAME
1	21071101002	ANITA MONDAL
2	21071101003	TUMPA RUIDAS
3	21071101004	RIYA KALINDI
4	21071101005	BARSHA LAI
5	21071101006	TRISHA KAITY
6	21071101007	AKASH TANTUBAY
7	21071101008	PUJA CHATTERJEE
8	21071101009	SATHI TANTUBAY
9	21071101010	PRITY PATSA
10	21071101011	RANAJIT KHAWAS
11	21071101012	ANIRUDDHA ROY CHOUDHURY
12	21071101013	SILPA BAURI
13	21071101014	ARPITA TUDU
14	21071101015	SANJUKTA ACHARYA
15	21071101016	PUJA TANTUBAY
16	21071101017	SANGITA MONDAL
17	21071101018	GOURANGA MONDAL
18	21071101019	SUCHITRA GORAI
19	21071101020	RIVA MANDAL
20	21071101021	PRIYA MONDAL
21	21071101022	RUMPA MANDAL
22	21071101023	SAMBHU MONDAL
23	21071101024	SHREYA LAKSHAN
24	21071101025	MOUMITA GORAI
25	21071101026	ABHIJIT BAURI
26	21071101027	SIBAN MANDI
27	21071103001	PRIYA GORAI
28	21071103002	SWAGATA DUTTA
29	21071103003	MITALI DUTTA
30	21071103004	DOLI BHUI
31	21071103005	DEBASISH DEOGHURIA
32	21071103006	PRIYA ATTA
33	21071103007	RIMPA KAR
34	21071103008	RIMPA DUTTA
35	21071103009	ANITA BAURI
36	21071103010	AKASH KAR



37	21071103011	SAMPA RAKSHIT
38	21071103012	SOMA MANDAL
39	21071103013	SONAI NANDI
40	21071103014	SUJOY KARMAKAR
41	21071103015	BARNALI MANDI
42	21071103016	SUMANA PAL
43	21071103017	BIJOY BAURI
44	21071103018	LAXMIPRIYA MONDAL
45	21071103019	SUDIPTA SHIT
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47	21071103021	RUMPA KUNDU
48	21071103022	PAMPA KUNDU
49	21071103023	MANAB NANDI
50	21071103024	MRINMAY MURMU
51	21071103025	SAIKAT TANTUBAY
52	21071103026	SHREYA GOSWAMI
53	21071103027	JHUMA ROY
54	21071104001	ALPANA MONDAL
55	21071104002	JHUMPA KUNDU
56	21071104003	KRISHNA LAKSHAN
57	21071104004	SUBRATA KARMAKAR
58	21071104005	RINKU MONDAL
59	21071104006	KARTIK DEY
60	21071104007	DINABANDHU KUNDU
61	21071104008	ASPIA KHATUN
62	21071104009	MANAS RAKSHIT
63	21071104010	BIKASH BAURI
64	21071104011	GOBINDA PRASAD MURMU
65	21071104012	INDRAJIT MAL
66	21071104013	LAKSHMIPRIYA BAURI
67	21071104014	ARCHANA HANSDA
68	21071104015	NILIMA BANERJEE
69	21071104016	BARU BAURI
70	21071104017	AVIJIT BAURI
71	21071104018	DEEPA MONDAL
72	21071104019	ATANU DAS MODAK
73	21071104020	BILKIS KHATUN
74	21071104021	RAMKRISHNA KUNDU
75	21071104022	PUJA GOSWAMI
76	21071104023	ARPITA SENAPATI
77	21071104024	POULAMI BISWAS

Mahavidyalyaya





78	21071104025	KRISHNAPADA MURMU
79	21071104026	SIKHA RAKSHIT
80	21071111001	SK JOSIMUDDIN
81	21071111002	BHAGYASHRI NAIR
82	21071111003	PRIYANKA MAL
83	21071111004	MONADIPA KUNDU
84	21071111005	YUNUS KHAN
85	21071111006	MITHU MAL
86	21071111007	RAHUL MANDAL
87	21071111008	SANTANA KAITY
88	21071111009	SK ASIMUDDIN
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97	21071111018	PRIYANKA MUKHERJEE
98	21071111019	RAKHI PAL
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101	21071201003	SAHENUR KHATUN
102	21071201004	RAGHUNATN BAURI
103	21071201005	MONORANJAN GHOSAL
104	21071201006	SIMA BAURI
105	21071201007	PUJA KUMBHAKAR
106	21071201008	SUSMITA KUNDU
107	21071201009	ANISHA CHATTARAJ
108	21071201010	PRASANTA KISKU
109	21071201011	TANMOY LAYEK
110	21071201012	AKASH KARMAKAR
111	21071201013	PRIYA MONDAL
112	21071201014	JHULAN SARBABHOUMA
113	21071201015	CHAMPA GHOSH
114	21071201016	BIPUL BAURI
115	21071201017	MUNMUN ROY
116	21071201018	SUSMITA MAJI
117	21071201019	JOYDEB BAURI
118	21071201020	BIJOY BAURI



119	21071201021	SUSHUMA KUNDU
120	21071201022	BIKASH BAURI
121	21071201023	PALLABI DAS
122	21071201024	PUJA KUNDU
123	21071201025	ANIMESH KARMAKAR
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128	21071201030	SAGIRA KHATUN
129	21071201031	ABHISEK TUDU
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131	21071201033	DIP SINGHABABU
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133	21071201035	MANOJ ROY
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135	21071201037	SAYANDEEP KAR
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143	21071201045	CHANDANA BASKEY
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158	21071201060	SUKURMONI MANDI
159	21071201061	SATHI KUNDU





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171	21071201073	SUMAN BAURI
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191	21071201093	SONALI HANSDA
192	21071201094	RAKHI MUKHERJEE
193	21071201095	SOUMITA KUNDU
194	21071201096	PRADIP BAURI
195	21071201097	SANTANU ROY
196	21071201098	AVIJIT MURMU
197	21071201099	SOMA MONDAL
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199	21071201101	BALARAM DAS
200	21071201102	SANGITA ROY



201	21071201103	DINABANDHU RAKSHIT
202	21071201104	TANUSHREE GHOSAL
203	21071201105	PUJA ROY
204	21071201106	PARUL BAURI
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207	21071201109	MAMPI BAURI
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211	21071201113	PRIYA GHOSH
212	21071201114	SUMITRA GHOSAL
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217	21071202005	LAKHINDA HEMBRAM
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219	21071202007	RUPCHAND KHAN
220	21071202008	SUMIT BAURI
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222	21071202010	MAMATA KHATUN
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268	21071202056	BARSHA BAURI
269	21071202057	NAMITA DAS
270	21071202058	PRANAB BAURI
271	21071202059	RAHIBUL KHAN
272	21071202060	CHANDI BAURI
273	21071202061	DOLON KUMBHAKAR
274	21071202062	SIKHA BAURI
275	21071202063	RUPALI BAURI
276	21071202064	SHUBHADIP CHOWDHURY
277	21071202065	SUBHAM ROY
278	21071202066	SK KALAM
279	21071202067	PRIYANKA DUTTA
280	21071202068	JYOTSNA BAURI
281	21071202069	INDRAJIT HANSDA
282	21071202070	ABHIJIT SANTRA





283	21071202071	SANTANU KHAN
284	21071202072	SANDHYA ROY
285	21071202073	APARNA PAL
286	21071202074	DURGABATI MANDI
287	21071203001	SOUVIK DE
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289	21071203003	SOUGATA RANA
290	21071203004	ARUP RANA
291	21071204001	SAMARESH SING SARDAR
292	21071204002	RIMU KHATUN
293	21071204003	PRATIMA HANSDA
294	21071204004	SAGAR RUIDAS
295	21071204005	ANIMA GHANTI
296	21071204006	NISPA KHATUN
297	21071204007	GITA BAURI
298	21071204008	RITA DEV
299	21071204009	LAKHINDA HANSDA
300	21071204010	ARUP MANDAL
301	21071204011	SHANTANU MURMU
302	21071204012	DIPALI HEMBRAM
303	21071204013	BISWAJIT KUNDU
304	21071204014	ABHIJIT KUNDU
305	21071204015	MALLIKA SING SARDAR
306	21071204016	REKHA BAURI
307	21071204017	BISWAJIT BAURI
308	21071204018	BAMAPADA MAL
309	21071204019	RAKESH LOHAR
310	21071204020	MAMATA MURMU
311	21071204021	INDRAJIT HEMBRAM
312	21071204022	SHIBSANKAR GORAI
313	21071204023	PAYEL LAYEK
314	21071204024	BANDITA MONDAL
315	21071204025	RADHARANI HEMBRAM
316	21071204026	PRADIP BAURI
317	21071204027	SARASWATI MANDAL
318	21071204028	SOUMEN TUDU
319	21071204029	BAPAN BAURI
320	21071204030	JAYANTA KUNDU
321	21071204031	PRASENJIT KUNDU
322	21071204032	ASTAMA BAURI
323	21071204033	INDRANI KUNDU



324	21071204034	BUDDHADEB HEMBRAM
325	21071204035	PURNIMA GORAI
326	21071204036	RIYA KUNDU
327	21071204037	DOLAN MAL
328	21071204038	SANDIP MANDI
329	21071204039	RUMA BAURI
330	21071204040	ADNAN RAHAMAN
331	21071204041	RAJESH ATHA
332	21071204042	RAJKUMAR GHOSH
333	21071204043	RITA PATRA
334	21071204044	TARAKNATH BAURI
335	21071204045	SAPTAMI BAURI
336	21071204046	DURJODHAN HANSDA
337	21071204047	SOMA PATRA
338	21071204048	INDIRA MANDAL
339	21071204049	SANJOY MONDAL
340	21071204050	ITU MONDAL
341	21071204051	RIYA MAL
342	21071204052	SANTANU BAURI
343	21071204053	NAMITA BASKEY
344	21071204054	SUBRATA GORAI
345	21071204055	KASMIRA KHATUN
346	21071204056	SANJU BAURI
347	21071204057	SUDIPTA TUDU
348	21071204058	SUSANTA MONDAL

Total students: 348 (Sem I).

Examined

Riya Pal 22/03/23

P. Kumbhakar  
IQAC Co-ordinator  
Chhatna Chandidas Mahavidyalaya

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Principal  
Chhatna Chandidas Mahavidyalaya  
Chhatna, Bankura



Glimpses of Field Study of Environmental Project (17<sup>th</sup> and 18<sup>th</sup> December 2022)



Photo.1



Photo 2

*P. Kumbhakar*

IQAC Co-ordinator  
Chhatna Chandidas Mahavidyalaya

*Malavika Sinha*

Principal  
Chhatna Chandidas Mahavidyalaya  
Chhatna, Bankura





Photo 3

*P. Kumbhakar*

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*Malavika Sinha*

Principal  
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Chhatna, Bankura