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Geophysical and Hydrological Parameters of an Opposite Flow of Water 'Ultapani' at Bisarpani, Kamaleshwarpur, Mainpat Plateau Surguja CG, India

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ABSTRACT

An exploration was done to study the reverse water flows called 'Ultapani' in village Bisarpani, Kamleshwarpur, Mainpat, Surguja, Chhattisgarh, India. The water flow ascents 14m. at that place against gravity force. Geophysical parameters like length, width, height and magnetic intensity, gravity, altitude and slope of Ultapani were measured along with hydrological parameters like flow velocity, flow perimeter, depth of flow, total height of wall, and force of flow of Ultapani at Village Bisarpani (forget-water). Trigonometry on ascent height and applied force calculations on these specific geophysics were discussed.

1. INTRODUCTION

Geo diversity might be geo morphological or geophysical specification [1]. Bernoulli's principle, Siphon's theory and Venturi effect are studied for upward flow in hydrology in relation with given passage or with geomorphology. While, Archimedes principle of floating by buoyancy force, F= d.v.g, is studied for stable water body in relation with floating object on or in it. Water flow velocity in river is in relation with slope and reverse of width. But due to certain geophysics, and natural activity, reverse flow is seen. *E*xempli gratia, River Ganga flows opposite due to ocean wave force at Kolkata WB India. Such miracle is also reported that up to small distance, rivers flow opposite, anti-gravity, like another Ultapani at Kokrajhar in Assam, India. It is situated 55 km away from Kokrajhar, Holtugaon Forest Division of Manas Biosphere reserve with full, richness of biodiversity and tourism of Ultapani Reserve Forest [2-5].

An uphill flow under an ice layer in Antarctica is discovered as a "Mysterious green ice spotted in Antarctica by NASA's Operational Land Imager!" It is a wave site showing detail description and video of this beautiful phenomenon. A mysterious feature of green ice has been spotted in Antarctica's Granite Harbor, a bay of the coast of Victoria Land, which spreads over an area of 26 km located in the Ross Sea. The photos of the Operational Land Imager (OLI) on Land sat 8 were taken on March 5, 2017. By Jan Lieser, a marine glaciologist from Australia's Antarctic Climate and Ecosystems Cooperative Research Center [6, 7]. There could be more such opposite rivers. Before being river all springs upward moves but atm. pressure, liquidity nature and gravity force make water flow toward slope. But uphill movement of water flow of open water current is up to limited distance; secondly, there are some gravity holes on earth where, even a geo scientist might surprise to visit to study suspended stones [7, 8].

Objective of the paper was to explore geosciences of reverse flow of water and measure it's geophysical and hydrological parameters and find out possible cause to ascent water current against gravitational force of Ultapani at Bisarpani village.

Figure 1 represents street map of reverse water flows called 'Ultapani' in village Bisarpani, Kamleshwarpur, Mainpat, Surguja, Chhattisgarh, Postal Index N^0 497111, India. GPS coordinates- Lat.22.878088999, Long. 83.281316199999 and Altitude 3203 feet to 3249 feet. Utapani is located between Darima (below Mainpat) and Jaljali (on Mainpat Plateau) [9-11].

2. METHODOLOGY

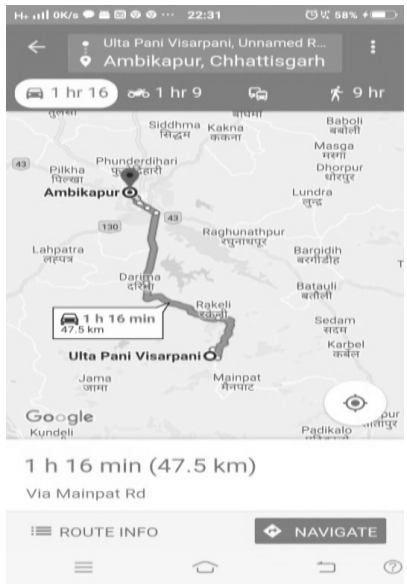

Figure 1. Street map of Ultapani

Authors arranged meter tap, thread, 4 keels, telescope, gonometer, one bottle water, steles meter tape (for flow perimeter), digital weight handbook 500 gram and Unitop Multimeter. Digital altimeter, slope meter, GPS, speedometer,

barometer, hygrometer, gravity meter and magnetic compass were downloaded. Methodology for measurement of height of Ultapani using altimeter and construction of temporary Sextant are described in reference 15. Calibration of mini electronic weight box 'Hand book 500 grams' was made in practice.

For the exploration of Ultapani Figure 1 was followed. The exploration of 'Ultapani' was conducted, approximately 47.4 Km. away from Ambikapur, the head quarter of Surguja division, on national highway N° 43 in east – south direction. It was done in hot summer (20 May and 01 June. 2019) at the environmental temp.37° to 40°C. Started from Ambikapur on Raigarh road (NH-43), just after 01 Km. it is bifurcated. We followed right side on Damali road in east – south direction. Passing through Darima 13 Km east turn was taken on Mainpat road crossing Machhali river before 22km to Mainpat, geological data like gravity, altitude, magnetic field intensity, atm. pressure, % moisture etc were noted, then Mainpat plateau was ascended with 30°-35° degree steep, with 62 curves reached to the side road before 3 km of Ultapani. There geological parameters are noted then west direction driving car reached to Ultapani at Bisarpani village.

Effect of external water, soil and stone were tested. Length, width, water flow velocity, water perimeter, angle of flow up side, etc. were manually measured and height from origin, altitude, magnetic field intensity, gravity and slope were measured by digital meters using android cell phone.

Table 1 represents comparative study of geological parameters below Mainpat plateau, on Mainpat plateau and at Ultapani Bisarpani Village. Hygrometer reading was 32% and barometer reading was 29.60 inch (75.18 cm) Hg and atm. temp. was 80°F (37°C). The height of Mainpat plateau is 540m as comparative reading in altitudes.

Table 1. Comparative study of geological parameters

Sr.	Places	Magnetic field	Gravity	Altitude	Clinometers reading	Sextant reading
1	Below Mainpat plateau	45 µT	9.8067 m/S^2	579m	12^0	101.6^0
2	On Mainpat plateau	47 µT	9.8067 m/S^2	1005m	9^0	98.5^0
3	At origin of Ultapani	21 µT	9.8066 m/S^2	976m	0^0	90.0^0

2.1 Geomorphology of Ultapani

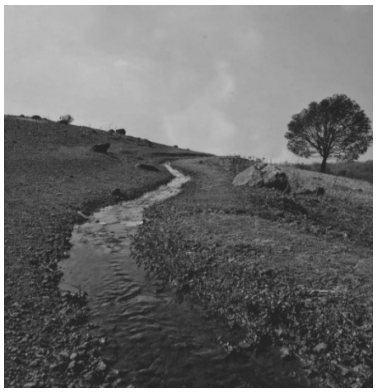

Figure 2. Uphill rise of Ultapani

Figure 3. Decline of Ultapani

Ultapani is originated as a small spring from a deep ditch of 4.2 cm below a mango tree (*Mengifera indica, Anacardiaceae*). It flows west direction with the equivalent force of 6.0 gram weight. The depth of water level is 8.0cm and flow velocity is 85cm per minutes. After 1.5m it flow upward by angle of 15.6° and then it rises little by 1.2° up to 25m, then it take a curve of 20° north west side up to length of 75m. Then it curve toward west direction up to 70 m, as shown in Figure 2. Then it curves toward south direction and rising up ends at 185 m length. Then it passes down through a pipe below road then flows downward in south direction with zero velocity stagnant and after 20 m, it was dried, got absorbed and evaporated by hot summer of 40 degree temp as represented in Figure 3.

3. OBSERVATION AND RESULT

3.1 Mainpat plateau

Table 2. General Inspection of Ultapani

Sr.	Inspection	Observation	Result
1	We poured drinking water from summer carry bag on flowing Ultapani.	The poured water too ascents with flowing water of Ultapani.	No effect of water chemistry.
2	We collected about 200 gram soil from other place and dropped on the flowing Ultapani.	Flowing water of Ultapani continued over the dropped soil.	No effect of soil chemistry.
3	We collected about 300 gram stone from other place and dropped on the flowing Ultapani.	Flowing water of Ultapani continued over and beside the dropped stone.	No effect of rock chemistry.

Table 2 represents comparative study of geological parameters below Mainpat plateau, on Mainpat plateau and at Ultapani Bisarpani village, the height of Mainpat plateau is 426m. There is difference of 2 µT in magnetic field intensity in between below Mainpat land and on the Mainpat, 03 Km before Ultapani. The average angle of Mainpat Plateau from low land is about 12°, while there is not any difference in gravity.

3.2 General inspection of Ultapani

The testing of external water from summer carry bag and general inspection of Ultapani was done. Ascending of water flow upward to the hill is neither affected by soil chemistry nor by water chemistry. Ultapani is very small water spring which flows up ward, magnetic hill side with a serpent path, it is existing well in hot summer at 37℃ to 41℃ (twice explored on 20 may and 01June 2019. It is running up to 200m hiking 185m, then flows toward slope, diffused and evaporated at end watering to human, birds and animals etc. of the village 'Bisarpani' meaning "Forget water".

3.3 Geomorphology of Ultapani

Measurement of angles of ascent of water flow was measured by sextant, by gonometer and digital slope meter. Table 3 represents geomorphology of the rise up of Ultapani; The electrical conductivity measurement of the Ultapani was done inserting the electrodes at the distance of 5 cm with Unitop Multimeter. Measurement of the length and depth was done with a meter tape.

Table 3. Geomorphology of Ultapani

Sr.	Places of Ultapani	Altimeters reading	Length from origin	Height from origin	Step angle	Conductivity x20μ Rho
1	Starting point 15 cm from origin A	976m	0.0 m	0.0 m	0.0^0	2.60
2	Quarter length B	985m	40m	6.0m	12^0	2.71
3	Half length C	986m	100m	10.0m	3.2^0	2.00
4	Three fourth length D	988m	140m	12.0m	1.8^0	2.21
5	End point- E	1005m	185 m	14.0 m	2.4^0	2.00

Table 4. Hydrology of Ultapani

Sr.	Places of Ultapani	Flow velocity	Flow perimeter	Depth of flow	Total Height of walls	Force of flow, in Weight	Calculated Hydrological force in dyne
1	Starting point A	85cm/m.	34 cm	8cm	2cm	6.00 gram	53928 x 10^{15}
2	Quarter length B	80cm/m	27cm	4 cm	11 cm	5.30 gram	47636 x 10^{15}
3	Half length C	65 cm /m	25 cm	6cm	5 cm	4.20 gram	37749 x 10^{15}
4	Three fourth length D	50 cm /m	22cm	6 cm	10 cm	2.65gram	23818 x 10^{15}
5	End point E	26cm/m	18 cm	5 cm	19 cm	1.20gram	10785x 10^{15}
6	On decline post rise	0.0cm/m	0.0cm	0.0cm	25cm	0.0 gm	0.0

Table 5. Geophysics of Ultapani

Sr.	Place at distance from origin of U.P.	Magnetic field	Gravity	Altitude	Clinometers' reading	Sextant reading
1	Before Ultapani (-185m)	45 μT	9.8067 m/S^2	1005m	-3.5^0	86.4^0
2	Before Ultapani (-140m)	46 μT	9.8067 m/S^2	1016m	-1.6^0	88.0^0
3	Before Ultapani (-40 m)	44 μT	9.8067 m/S^2	996m	-3.0^0	86.5^0
4	Origin of Ultapani (00.00 m)	21 μT	9.8066 m/S^2	976m	0.0^0	0.0^0
5	40m length of Ultapani	32 μT	9.8067 m/S^2	991m	12.1^0	112.0^0
6	100m length of Ultapani	38 μT	9.8067 m/S^2	993m	4.5^0	95.0^0
7	140m length of Ultapani	43 μT	9.8067 m/S^2	995m	4.5^0	96.0^0
8	185m length, end point of Ultapani	50 μT	9.8067 m/S^2	1005m	3.2^0	93.0^0
9	230m distance from origin (After end of UP)	45 μT	9.8067 m/S^2	942m	-2.2^0	88.0^0
10	270m distance from origin (After end of UP)	46 μT	9.8067 m/S^2	930m	-4.5^0	86.3^0
11	320m distance from origin (After end of UP)	47 μT	9.8067 m/S^2	920m	-6.4^0	84.5^0

3.4 Hydrology of Ultapani

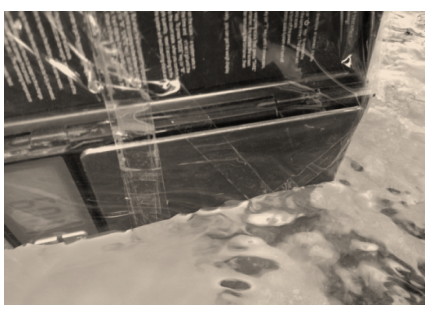

Figure 4. Mini weight hand book 500gram measuring flow power

Table 4 represents the hydrological parameters. Figure 4 represents the force applied by Ultapani to flow water against gravity up to 14.0m. It was found to be equivalent force of 6.00 gram weight.

3.5 Up rise force

Given in Clark's table Science data book (pp 80):

01 kg = 8.988 x 10^{16} Joule
Or 1,000 gram = 8.988 x 10^{16} Joule
06 gram = 6 x 8.988 x 10^{16} / 1000 Joule
=53928 x 10^{10} Joule
=53928 x 10^{17} Erg
=53928 x 10^{15} Dyne

3.6 Geophysics of Ultapani

Table 5 represents the measurement of geophysical parameters at very hot summer season, when about all small seasonal rivers dried by atmospheric temp. between 37^0C to 410C. Hygrometer reading was 32% and barometer reading was 29.6 inch Hg.

4. DISCUSSION

Figure 5a. Magnetic compass at origin of U.P

Figure 5b. Magnetic compass at end of U.P

Opposite flow of Ganga river in Figure 6, is due to an ocean wave pressure, but here in Ultapani, it seemed to be by the magnetic field intensity gradient of magnetic hill. This, as in Figure 5a and Figure 5b, difference was more than double. This change could be due to absent of hematite and increasing from 21µT to 50µT from origin to end. Therefore, it is a magnetic hill. There is at origin 21µT but on the end of Ultapani is 50µT. By this difference, the water flow with the force of 53928 x 10^{15} dyne. Nature has mystery and there is need of further study, since magnetic field may change due to solar waves, seasonal rotation of earth, diurnal rotation of earth, inter planetary attraction relationship.

Figure 6. Opposite flow of Ganga at Kolkata

4.1 Trigonometry of Ultapani

By the angle of 12° Ultapani rises to upward, If Origin point is A and after opposite anti gravity flow end point of Ultapani is point C. where CB is 14 m. by altitude difference between origin and end of Ultapani. Pythagoras principle is hypotenuse ^{2} =base^2 + vertex^2

$$(185)^2 = (AB)^2 + (14)^2$$
$$\text{Or } (AB)^2 = (185)^2 - (14)^2$$
$$(AB)^2 = 34225 - 196$$
$$\text{Or AB} = \text{under root of } 34029$$
$$AB = 184.47\text{m}$$
$$\text{Therefore } (185)^2 = (184.47)^2 + (14)^2$$
$$34225 = 34029 + 196, \text{ thus verified.}$$

Tan theta base, should be the height of Ultapani, the total of angles rising up water flow up to 185m, then downward flows. The total of positive steep angles and negative slopes angles measured by slope meter. The sum of all angles in table 5 column 6 slope meters is:

$$(+24.3)^0 + (-20.90)^0 = 3.4^0$$
$$\text{Tan } 3.4^0 = 0.05941094706$$

0.05941094706x184.47=11m. The calculated height to ascent water flow is 11m, while measured height is 14m; the difference of 3m height is error of angle measurement.

4.2 Concept of gravity holes of the earth

Opposite to chemistry of Tintina stone [13], Flying stone [9] is total burned mars meteorite's melted ash, when fell to the earth, it jumped to be suspended on air as it has a flat lower surface in its texture, as depicted in Figure 7 and 8. There are

gravity holes on the earth where the suspended stones are found [10]. Such gravity hole could be Ultapani, although gravity difference is negligible, the difference is 0.0001 m/s^2 to be negligible.

Figure 7. Suspended stone1

Figure 8. Suspended stone2

4.3 Concept of astrophysical force

Our earth is at about median position of planetary solar system, and our solar system is at about median position of Milky Way. The gravity of Milky Way G' is feeble due to high solar system's G gravity, and the earth's gravity is g. There is also an attraction between objects termed as cohesion and adhesion force, the magnetic attraction of hill is g'. There is an interaction between G, g and g', and resultant gravity may be a cause to ascent water flow toward step of hill [30].

Solar angle of earth is time and solar energy of gravity helps to ascent water in Ultapani. Second law of times is law of opposite, providing theory for opposite force of astral time line; It may be a cause of opposite water flow. Ultapani is specific geophysics, as well as, astrophysics to ascent up water flow. Gravity of the solar system G is responsible. But how to prove? Since, at Ultapani a miracle happened, to be observations opposite, author got confused when visited twice, therefore, thought of opposite flow by force of time line [31].

There might be also a relation with the River Narmada, originated from Amarkantak MP, about 150 Km far from Ultapani, which is uncommon to flow toward west direction, likewise Ultapani. Microscopic longitude and latitude of the earth and of the solar system should be examined and theirs affected resultant gravity should be more or equal to earth's gravity force. Because problem here was that, magnetic field intensity force (μT) of the earth fluctuate to more than double but gravity doesn't change.

4.4 Bernoulli principle

Since, river science has a law *i.e.* width of river is in proportion with length and flow toward slope. But here is gradual decreasing width of Ultapani to flow toward steep. Its geo morphology is help full to follow Bernoulli principle, $p_1v_1=p_2v_2$, in table 4 column3, width of Ultapani decreases gradually from 34 to 18 cm. Water stagnates but there is passage to upward flow by adhesion and-cohesion forces between water molecules and between soil particles and water molecules.

4.5 Specific geo diversity

There are many mysterious geo diversity. *e.g.* Jatinga, a birds suicide place [28], 03 days in each year in July , flow of red water from Shri Kamaksha Temple Assam (29), singing stone and musical stone [13], suspended stones [9, 10], heartbeat of earth[14], opposing flow of Ganga [8], opposite glacier flow [6], snake land [17] etc. Ultapani is one of them a natural miracle created by difference of geo magnetic field intensity [27].

4.6 Further scope of the study

Science is diversified; Ethics is that, Ultapani is manmade, 200 years before such a way for social services of hydrology for water supply. Some scientists can study Ultapani pure mathematically applying sine theta and tangent law to calculatem force applied by Ultapani [18-20]. One can calibrate a geodetic sensor for metal detection inside earth causing magnetic field [21-23] There are intelligence applications in these areas of study [24-26] Study of magnetic field could be done [27]. It is not any scope, of course, in zoology, since, even a fish was unseen. While, there are full hydrophytes herbs in Ultapani. River Ganga if, in deep flows southward to Bay of Bengal, by river's hydrological force. But on surface it flows northward to temple by ocean wave force. Therefore, at the middle line of both opposite currents, the difference for the floating material or swimming organism could be of an interest [8].

5. CONCLUSION

Ultapani is opposite water flow rising to a magnetic hill up to 185m due to magnetic intensity gradient from 21 μT to 50 μT. Also, it could be due to specific geo morphology following Bernoulli principle with the force of 53928 x 10^{17} Erg or 53928 x 10^{15} Dyne**.** Electromagnetic properties of water are described in ref.32. Ultapani is just out of the perimeter of Indian snake land Tapkara; therefore, it is suggested to visit with precaution. November to June is good time to visit Ultapani [17].

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