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“1000 YEARS MERAPI PAROXYSMAL ERUPTION”

Theme:

Volcano: life, prosperity, and harmony



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Indonesian Association
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Special Province



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Central Java



Volcanology & Geological
Hazard Mitigation

FOREWORD

Many places of the world are built of volcanic products, many islands grow and many countries develop by volcanoes. There are some historical records of volcanoes, for example Vesuvius of Italy, Pinatubo of the Philippines, Paricutin of Mexico, Mauna Loa of Hawaii, and Merapi of Indonesia belong to immense world destroyers. Although in the matter of fact many volcanoes are associated with people life and prosperity. We cannot disavow that despite threatening with their hazards, volcanoes give inexhaustible bounties to the people surroundings with fertile land, abundant groundwater, plentiful industrial mineral resources, and beautiful landscape. This means that volcano is opportunities. But unfortunately some volcanoes especially in Indonesia are faced with environmental threats.

For scientists, volcanoes are natural laboratories, as their characters differ from one to others, they will make every study and assessments are always interesting to be discussed, evaluated, and developed. From socio-cultural points of view, life in such volcanic environments is generally specific, varies from that of coastal, karst, and desert areas. For that reason, a world-wide gathering with interdisciplinary background is held in the name of Volcano International Gathering (VIG) 2006.

The moment is dedicated together to better understand and evaluate the bearing capacity of a volcanic environment for a suitable management, and to better approach such an integrative and interdisciplinary view and to achieve flexible solution for volcano management, because catchment's related solutions are more important than local solutions. Records of experience and knowledge of various issues, data and information on volcanic science, technology, and environment are displayed in this proceedings.

Last but not least, Indonesia especially Yogyakarta with Merapi as well as many other countries of volcanoes of the world are faced with volcanic hazards on one side, and a fast developing economy on the other side, which often pushes environmental concerns into the background. This is due to the mostly delayed reaction of the environment on disturbances of equilibriums. However we should keep in mind that the environment has a significant and unfortunately also sustainable memory and our knowledge about attenuation capacities and resilience's of the environment is still low.

Yogyakarta, 7 September 2006

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PHENOMENON OF EARTH GEOLOGY IN PERSPECTIVE OF MULTIPERCEPTION – THEOLOGY

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Abstract

Earth is a small part of planets in this great world, that in balance dynamics it requires the existence of mounts. With respects to power of slab which can result in tectonic earthquake and also tsunami, this dynamics is happened because of mobility of gas and material of magma in this earth, that in activities of its writhing it can result in volcanic earthquake, a phenomena that is believed will be able to recycle the material contained in it.

I. INTRODUCTION

2006 will, perhaps, become “Geologic Momentum”, namely the year when geology and its various phenomenon become the focus of attention for people in general, even it becomes the focus of study of various natural phenomenon of earth. The focus of society attention, mainly Indonesian people, and specifically the people of Special District of Yogyakarta (DIY) actually has been started since the remembrance of one century of eruption of Merapi – active fired mount, even it is one of the most active mount in this world, that is located in two provinces, Special District of Yogyakarta (DIY) and central Java – by the committee of VIG UPN “Veteran” Yogyakarta, the last March. The phenomena of Mbah Maridjan in that time began to expand, even in the time of closing, activity of photographing together with officials become less merry than the desire to take photograph together with participants of remembrance with the character of Mbah Maridjan. That time, the central government even paid special attention to the worry about the awesomeness of Merapi explosion.

On 27 May 2006 before morning around 05.55, when the society attention gone to activity of Merapi mount, natural occurrence in the form of earthquake in scale of 5,9 SR had shaken, even crushed completely DIY (specially Sub-Province of Bantul) and Central Java (specially Sub-Province Klaten). Detriment was not only material, but rather than that is immaterial detriment. We could conceive, what an entire hospitals in DIY were at a loss what to do to take care of the corpses of earthquake victim though only in open veranda and also in yard of park of the hospitals, the hospital were unable to load and operate for the patients, till non ambulance cars, even helicopters were conscripted to transport the victims to some hospitals in Central Java, East Java, even DKI Jakarta. How many citizen - especially those who feel that happen – that until some weeks, even until now were still traumatic to, not only wobble and shake, but also small vibration resulted from machine of motor vehicle even if. Caring to accident of Jogja-Jateng emerged everywhere. Not only society and group of organization in DIY-JATENG and also other provinces Indonesian clefts which were care to collect fund, to send volunteers and medical team as well as its equipments, but society delegation in various states, like England, Iran, Mid-East States, Japan, American and others, also have a care.

II. GEOLOGICAL PHENOMENON

Merapi activity that on that time become a focus of attention for many parties, in fact, could inculcate knowledge to wide society, specially those who were residing in the feet of Merapi, not only about the vocabulary of "geger baya", "bilik mesra", or wind

movement, but they were also recognizing more geological term, like a word of magma, volcanic and derivatives (dusty of volcanic and volcanic earthquake). They also fluently mention the lava term with its derivative, like red hot lava and its movement that was clearly visible when it was happened in the night without overcast screen or fog closing Merapi; beside of course most of them almost accustomed to life having colony, know about the meaning of living together in schools and in the tents of evacuation, and so on.

After earthquake the last of “27 May”, at least most of society Yogyakarta also did not feel strange again with the vocabulary like, tectonic, continental plate, subduction, mountains in the base of sea, and so on. Common society that formerly did not know the word “geology” now they are able to say fluently a sentence: “Gempa tektonik kemarin itu khan penyebabnya karena lempeng Australia menunjam lempeng Eurasia”; “ada yang bilang pusat gempanya di Bambanglipuro”; “untungnya gempa yang mengejutkan masyarakat Jakarta, pusatnya ada di Samudera Hindia dengan kedalaman sekian kilometer di bawah laut”, dan seterusnya. Society has begun to know the use of sands, hill, even tree of mangrove that is really able to control the vibration of earthquake. And the most important is the emerge of awareness of religion as well as the awareness of how small is human being.

At occurrence of tsunami of evening Monday, 17 July 2006 then befalling coastal area of Pangandaran Ciamis, coastal in Cilacap and its surroundings, saving of society knowledge increase the with the knowledge about cause of occurrence and effect of generated by tsunami, even the way of its saving. Many people which start to recognize the forewarning system (early warning system) earthquake tsunami which its price per its unit can reach the rupiah milliard.

Case bubble up it hot mud in Sidoarjo of East Java which because of drilling activity done by PT. Lapindo Brantas also represent the occurrence of related to phenomenon of earth and earth. From this accident the society recognize the term “mud” hot, as “material” secretory from earth stomach. There is feeling concerned about, mud which is if to wash away able to suffuse the area for the width of this **Kotamadia Depok**, will be able to engulf the Sidoarjo as a whole. Even some of also there is connective it with the : “heavy burden earth” what is released by a final day moment, as depicted by QS, 99 : 1-2.

“ If earth jiggled with the awful convulsion ; and earth have released the heavy burden (contained)”.

In the eyes of Islam theology, earth is creature (creature translated by as God creation, as Al-Khalik/creator), what even do not **intension** movement it like the way cloud (QS, 27 : 88),

“ And you see that mount, you suspect its remain to in place, though he walk as the way cloud”

Movement like this very possible caused by mobile of earth magma, in the reality is equal to result of research of geodesy expert that its thick plate reach 20 till that 30 kilometre – even movement it only gyrate 5 till 10 of its centimetre per year so that its kinetic energi is very awful It is true make a move. This movement result the smash-up, bloom the, to stick in the ground, pleating and others, what all the things in order to going to balance and advantage mankind and entire existing being. For a while mount as an being residing in the above mentioned continent plate perhaps also experience of movement.

III. EARTH, EXPERIENCED, AND EARTH PHENOMENON.

To support the understanding of about earth as planet capable to be dwelt by specially being live the intension eye of like human being, animal, plant and also which do

not intension eye as does angel, genie and of a kind. In the reality we must see and compare it in this great arrangement world makrokosmis.

Earth as one of planet owning diameter of about real 12.500 km of its size measure only “per one million two hundreds fifty thousand” size measure of sun and its mass “percent thousand” sun mass. Its meaning is this earth is small being residing in in galaxy clump which its amount milliard, in an big experienced space frame the most which its dimension 15 – 20 light year milliard. Still in the eyes of most human being, till in this time earth represent the single dwelling place which at one blow as obyek experiencing life and look for the subsistence (QS, 71: 19-20)

“And God make the earth for you of as carpet so that you go through to take the air that wide under the sun”

Simple question to confirm this fact is : whether pasca tsunami which knock over some of earth resident (Indonesia, Thailand, Srilangka, Bangladesh) 26 December 2004 then, and continue at earthquake befalling region Yogyakarta and some of Central Java, vomit mud in Sidoarjo which still continue till is in this time added by a awful earthquake disaster other;dissimilar previously which knock over the other;dissimilar state region, and also don't know what and when again to be happened the, this earth resident still make earth as carpet in experiencing life and look for subsistence?.

If we see the other planet like Pluto, Neptunus, Uranus, Saturnus, Yupiter, Mars till Mercury planet hence in the reality earth of is single most dwelt the balmy and compatible planet. Pluto is planet which its temperature about - 238 0C, its atmosphere attenuate, and will be gasiform if this planet reside in nearer only a few to sun. Will be like if its is dwelt by human being which is because its greed so that make the content the gas become ever greater. In moment its will be blanketed by ices coat.

Neptunus represent the planet which though do not as cool as Pluto, but coldness reach - 2180C. Its atmosphere is consisted in by a hydrogen, helium, and poisonous metan endangering human being. Added again, in this planet is its wind speed can reach 2000 thundering kilometre per hour on the surface of. Conceiving, whether human being can omit such in a condition? Planet Uranus, its condition nor too far differ from Neptunus.

Saturnus, as second biggest planet after Jove with the system of is in form of ring consisted of by the rock, ices and its obstetrical gas 75% hydrogen and 25% helium which circuit it. Though its temperature is hotter (- 1780C) compared to by Neptunus but because big volume gasnya in such a way, hence to step on is there required by a implement have float.

Jove represent the biggest planet in solar system which is the level of 318 big times earth is also lapped over by gas. Red blot of giant knew by 300 last year by astronomer in the reality is very strong storm by radiasi is high, dazing in atmosphere Jovian of during for centuries. this Storm strength if residing in the near by earth will be able to totally ruined even swallow it.

And surely Mars is mostly consisted of by the dioxide carbon, with entire its surface in the form of cauldron as continuous meteor smash-up result and big wind resulting sandstorm capable to hold out the days, weeks. Even in this planet is estimated by there is life marking, but to a human being still need the plenty of adjustment. That is its meaning though various accident befall the earth in the reality in the eyes of and understanding of human being, earth represent the most ideal planet to be dwelt by the human being and other life being. Two especial matter becoming this base idealitas is, temperature and atmosphere which can be used by a being live to breathe.

In the eyes of theology, earth is carpet of while mount is represent the dowel (QS, 78 : 6 - 7)

“Isn't it true that us have made earth as carpet, and mount as dowel”

what its existence can **eliminir** of magma mobility so that do not joggle its dweller (QS, 31 : 10 and QS, 21 : 31)

“God place mount in (surface) earth so that that earth do not joggle you”

“and We have make under the sun this sturdy mount so that that earth (do not) shake with them”

Thereby exsistention mount under the sun this beside the core important as penstabil of movement of earth magma, also as stabilized of wind movement, as its exit place is material from earth stomach which is a lot of its benefit for human life. We know how big of benefit petrify and its derivation for dwelling place for human life (house, officeblock, observance place, etcetera). We also know how big of lava benefit in fertilizing planted plant.

IV. THE EARTHQUAKE AS EXISTING BALANCE.

Earthquake as an accident that happened effect of of material elasticity in earth which shall no longer ready to accomodate the energi which prooved, will cause the motivation in the form of very dangerous sudden earthquake. Particularly if this happened at the sea with the big scale, hence will cause at formed its tsunami, as occurence in Aceh five last year, and to shake Pangandaran Ciamis some last week. But if its occurence in continent, hence energi generated will creep through/passing media (**slice**) which is the no time weakening it, so that if the plate own to access which is near by from mount, will push it so that vomit the material (**magma**) pass volcano in plate frontier. If its pattern is regular, hence vomit this can be controlled in the form of hot energi of earth which is a lot of exploited by human being, but in reality of most exit disjointedly, even do not in control so that result incidence hot cloud, red hot lava or even generate the dusty rain.

Nevertheless, this mechanism which we believe it is true intend in design by God to take care of the stability of energy geodynamics. (QS, 16 : 15)

“And God stick the mount under the sun so that that earth do not shake with you”

V. STUDY BENEFIT.

Though some geology expert, what is like night moment of before **seventeen August** yesterday “in demand” asked to present the earth science, this is perhaps **era** “free promotion” for us and all related/relevant expert with the earth and its occurence phenomenon (geology expert, geodesy, geografi and so on), to do the process transfer natural of earth science to society.

Earthquake of Tektonik and also tsunami generated, earthquake vulkanik which can cause its puking is red hot lava, hot lava, even able to erupt the mount, and also other accident related to earth phenomenon in the reality represent the study media which is both for mankind. From other side the society able to recognize the vocabulary’s of related to earth term, and earthquake (handling technique and also its operation, in society also start to emerge the awareness by doing x’self approach to **Dzat** which the most create the earth and fill.

From God also emerge the local wisdom as potency on a long term nya must can be developed by as an hypothesizing. Who at that time number that fish lele becoming myth of Japan society go together the earthquake, in the reality can in comprehending in its science as animal which is because its life habit in base irrigate to own the sensitivity to creeping wave which will be happened the. Animal of like bird, monkey, even tiger also own the sensitivitas to heat, so that moment of mount have fire will release the hot lava

they feel it is in advance compared to with the other being for example human being which is in rain or shine more occupied with the things which in character physically-earthly again in the case of a kind of this, Mbah Maridjan become the buttonhole fenomenal which its existence require to be studied scientifically. Because its ability hit the experienced marking, related/relevant specially with the Merapi mount not because of buttonhole “Braveman” its he start upraised to surface as buttonhole “selebritis” which his face do not only pop out in much television, but, his picture is shown at t-shirt as “President” (the master) Merapi. Even as far as which we recognize Mbah Maridjan represent the buttonhole tawadhu’ what is not easy praised, idolized and figure, not impossible matter if at one time he will be able to be made as “myth”, specially for society of around him.

“**Tahayul**” coming from root word (Arabic) **Hayal**, meaning something that imaginer because of relied on day-dream. The myth Lele in Japan, other animal and birds in Merapi, and even the other under the sun creature in fact come from wisdom local developed from that area. Cloud Sirrus which now a lot of attributed to earthquake by society a lot of comprehended as phenomenon “anomalis” from rain or shine of earthquake, especially in Japan and Bam in Iran must it nor adjudged out of hand as **tahayul**. Very it is possible that our limitation comprehend something scientifically in this time, will change at a period becoming the erudite something that because and also invention new reason agreing it. Whoever better be wise in attitude of every case. Whenever will affect something mistical **tahayul** and is not erudite, instruct and guide the society of good “love” experiencedly this become the religion and erudite people, so that able to develop the potency of science and religion well and real correct.

Earthquake phenomenon of is inclusive of tsunami and vomit the lava, and also earthquake of mount Merapi if contemplated correct in fact represent the part of mechanism given by God to recycle the material. (inclusive of energi, mineral, and also maseral) what is a lot of exploited by human being this earth dweller. With this mechanism, hence there is mineral worth like gold, silver, copper, iron, as well as oil, hot energi of earth, coal which is boosted up to near by easier earth surface so that mined and exploited. Or garbage might possibly be organic to be oppressed with certain pressure later can be exploited to become the substance baker. From ash vulkanik also expected will give the fertility addition to all farmer around mount to cultivate the its agriculture farm area. Non impossible something that if occurence of a kind of this,

In fact God want “recycling” creature, inclusive of human being to be replaced by new creature (Q.S 35 : 16),

“if God want, undoubtedly God annihilate you and conducive to the new creature (to replace you)”

VI. CONCLUSION AND SUGGESTION.

Two important matter which can be pulled as Iesson is, that earthquake, tsunami, slide of mount land and hilly, floods of arising out because of destroying experienced the ekosistem, and others represent the accident and at one blow **hikmah**. Accident not yet of course **adzab**, but very it is possible that representing to try. While **hikmah** is the Iesson which must can be taken to be evaluated and anticipated (if possible) to a period of to coming. (QS,(59) : 18 :

“and shall each x'self do the past evaluation for the planning of future”

By the look of it hence strive the ruining to nature having an in with to destroy the (ekosistem), like forest depilatory, mining which do not mind the anticipation to negativity

impact which possibly will be generated [by] the inclusive of drilling of oil and earth as QS, 30 : 41,

“have arisen damage in land and also in sea caused by deed of human being hand”

Have to start really studied and evaluated, so that do not affect at natural by loss of nature, earth, and entire its dweller.

VII. BIBLIOGRAPHY

1. -----, (1971), *AL Quran dan Terjemahnya*, **Departemen Agama Republik Indonesia, 1971**
2. **Amhar, F.**, (16 Mei 2006), *Fenomena Gunung Api dan Lempeng Bumi*, **Harian “Kedaulatan Rakyat” Yogyakarta**
3. **Prastistho, B** (2006), *Bila Bumi Bertutur*, **Pidato Pengukuhan Jabatan Guru Besar, FTM, UPN “Veteran” Yogyakarta**