

A conceptual image featuring a hand holding a small green plant with soil, symbolizing growth and care. In the background, a satellite is visible against a light, hazy sky, representing technology and global connectivity. The text "Invited Speakers" is centered over the image.

Invited Speakers

COUNTERKNOWLEDGE IN AGRICULTURE POLICY PROCESS

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ABSTRACT

Counter knowledge (CK) is defined as misinformation packaged look like fact. A fact is a thing that is known to have occurred, to exist or to be true. Essence of CK is that it purports to be knowledge but actually is not knowledge. It misrepresents reality, deliberately or not, by presenting non facts as facts. It is rational irrationality.

CK in agriculture policy may be studied in food self sufficiency strategy and farming transformation under market liberalization program. To prevent public policy process from CK infiltration, knowledge base management system must be supplemented in the policy analysis and narrative. The Ministry of Agriculture should set up Executive Intelligent Information System mechanism as preemptive measures against CK.

Keywords: CK, misinformation, EIS, Policy Process.

INTRODUCTION

CK is a new terminology in information science as well as in communication technology. But application of CK or CK emergences actually has been exposed to the public for quite a long time, since the introduction of Conspiracy Theories and Fake History. CK as intelligent product of high level management practices, is intended to serve vested interest at all cost, either by design or otherwise.

To understand CK, first of all, we should define CK scientifically. According to Thompson (2008), CK is misinformation package to look like fact-packages so effectively indeed, that the twenty first century is facing a pandemic of credulous thinking. It misrepresents reality by presenting non facts as facts. A fact is a thing that is known to have occurred, to exist or to be true.

We cannot infer the truth of information by observation only, but we can challenge it by observing facts that run counter to it or by showing no facts support it. Before we justify something as CK, we must be able to demonstrate that its propositions are factually incorrect, because the propositions of conspiracy theories or pseudo-scientist bragging are so obviously ridiculous. Their arguments can be put down just using basic statistic, possibility theories with elementary logic or thru search engine in website.

The CK user often insist that their ideas should be taken seriously because “no one has been able to come up with **better explanation**” for whatever information they have produce. For instance, does anybody able to replace GDP as development index for national prosperity? Do we

understand why Efficient Market Hypothesis is CK-pseudoscience?

CK-INDUSTRY

Thompson (2008) stated that at a time when our technique for evaluating evidence are subtler than ever before, CK is not only fooling the public but also corrupting intellectual standard across a range of disciplines. In contrast, we do expect university lectures, professors, doctors and other professionals to help us distinguish between a fact and unproven hypothesis.

It takes brilliant experts to make advantage from CK, to package false information so skillfully that question about truthfulness and accuracy either never arise or effectively brushed aside. In addition, celebrity scientist can efficiently spread CK-messages to government, universities, websites and above all, the mainstream media. If the CK-entrepreneur is lucky, word of mouth and internet takes over to deliver free publicity. Consequently, business speculators and politic manipulators jump on the CK wagon.

Then, CK-Industry is born in mass-media, unconstrained by inconvenient facts, enabling their creative directors to repackage real-life into storytelling extravaganza. Fact is present to public as entertainment, and increasingly, trough we may not be aware what is happening, entertainment is presented to us as fact in the name of infotainment. CK-Industry becomes profit-seeker vehicles, full of free-riders.

An information system perspective should also be a key element for public policy design and implementation (Duggan, 2010). The dangerous implication about CK-based information is not

only establishing control effect to public opinion, but also could go deep into the mind of policy makers. Then, with strong support by corrupted consultants and sloopy research, the CK become part of policy process in the top level government authorities.

CK-AGRICULTURE CASE

There are many CK-case could be explored in the agricultural policy process and narratives. This paper discusses only two most critical issues, which are:

1. Food self-sufficiency strategy (Indonesia case)
2. Rural farming under market liberalization (Myanmar case)

First, the rice population policy to meet increasing demand for staple food in Indonesia. The formula is simple, if supply relatively equal to consumer demand in the given period, self sufficiency was achieved and no need to import. Demand calculation is not difficult to execute. Its multiplication of distributed regional population with consumption per capita per period, in which statistical inference is progressively applied.

But not so easy, if we try to estimate supply side information by:

$$\text{Rice Production (t)} = (\text{Harvest area (t)} \times \text{productivity}) - \text{post harvest loss}$$

Recently, estimating productivity (ton per hectare) and post harvest lost (%) has been done well by Central Bureau of Statistic with sophisticated method and reliable instrument. How about prediction of harvested area (hectare per time period per location)??

The Bogor Agricultural University working group for Crisis Management Protocol in 2009, had studied the GDP calculation on food sector. The in-depth observation was on data acquisition for rice harvested area estimation, down to the field for first hand information. And not surprisingly, there are indication of CK-practices within the instrument and method of data gathering. By event analysis, is that CK-occurrence could affect the national policy process? How about 20% biased due to unreliable input data?

Second, issue concerning the role of capital and credit in rural transformation under market liberalization. There was an interesting study in Myanmar by Ikuko Imamoto in 2008 from Jetro-Japan. Her works offers important insight into the transition from a socialist way to a market based economy, where local level business responses to market incentives.

Market liberalization in Myanmar began in 1988, under the new regulations, socialist policies that limited disparities within the rural population were removed. Farmers began to operate in the context with little government control over price

and marketing, even though the sector was not fully deregulated.

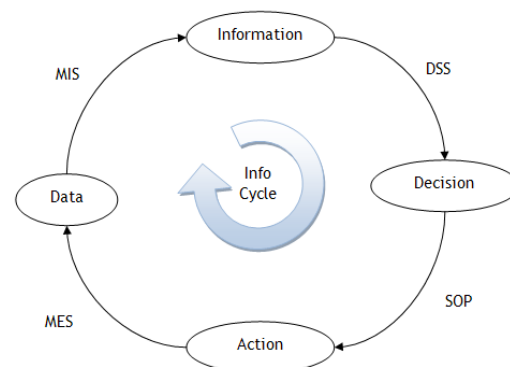
But, she founds that transformation has some unexpected consequences. For example, market liberalization in the new export oriented pulse agro-industry produces **increasing** economic disparities among different classes in rural Myanmar, largely determined by access to land, capital and cash. Traders benefit the most, and landless farm labors the least.\

Now, where is the CK practice? It is in the importance of capital and the role of credit linked arrangement. The interest charged to farm labor (5-15% per month) is much higher than to the landlords or traders (3-5% per month). This difference in the range of interest indicates in a distinct way the extremely poor credit standing of so much landless farmer, compare to the solid credit of so few landlords and traders. This implies that only those who have accumulated capital can expand their economic activities, hence widening the income distribution gap.

The CK affluences cover from policy makers to distinguished experts who give advice about trade-off between growth and equity; based on invalid theory of trickle down affect thru free market fallacy. In her point of view, Okamoto concluded that market liberalization surely activated the rural economy thru cultivation of best local commodity, but unfortunately was accompanied by on **acute increase** in economic disparities. The huge economic disparity may potentially led to instability in rural society which has been relatively static since Myanmar independence. Butterfly effect of CK-practice might start to ignite.

CK-PREVENTION

It is much easy to prevent then to cure or restore any damages. The analysis of CK prevention might be begun from the role of information in policy process as below:



- MES : Management Information System
- DSS : Decision Support System
- SOP : Standard Operational Procedures
- MES : Monitoring and Evaluation System

Figure 1. Information Cycle

In the real world, CK can infiltrate within MIS framework, but the more damaging effect will occur in the DSS part. Therefore, it is recommended to improve DSS with Policy Dialogue expressed in the Knowledge-Base Management System (KBMS). Albinson (2008) believe that the intellectual world is shifting from thinking of knowledge as more or less exact deceptions of reality into a mood of thinking of knowledge as more or less useful views or solutions-impacting different stakeholders in different ways. The insert of KBMS which contains rule-based data mining and warehousing control, could screen any CK virus and pseudo-scientist intervention. It is challenging for academics, especially information scientist-AFITA, to conduct in-depth research and policy design with **CK-proof** EIIS (Executive Intelligent Information System) for agricultural policy.

In practical aspect, we could prevent CK occurrences in agriculture policy by making checklist of **CK-wall**, particularly in the forecasting technique of supply and demand for strategic commodities. The CK-wall checklist may refer to Austin (1992) such as:

1. Are the forecast based on sound data?
 - Are the data sources consistent?
 - Are the units of measures standardized?
 - Have all the relevant secondary data sources been used?
 - Was research use to generate primary data?
 - How were the data collected?
 - Are the data representative verified?
 - What are the underlying assumption of the data projection?
2. Are the forecasting method appropriate?
 - Who provide the judgmental estimates?
 - What was the basis of their expertise?
 - Can other relevant opinions be gathered?
 - Is trend projection were made? What is time-series data?
 - What causal relationship assumed in the model?
 - Are the assumptions reasonable?
 - Is the previously used forecasting method still appropriate?

The new science of information and communication technology must be utilized at most for preemptive actions against CK circulation on the internet and virtual means. We must not turned our backs on the modern ICT that enable us to distinguish fact from illusionary CK. It will be scholar's fault if the sleep of reason brings CK catastrophic impacts.

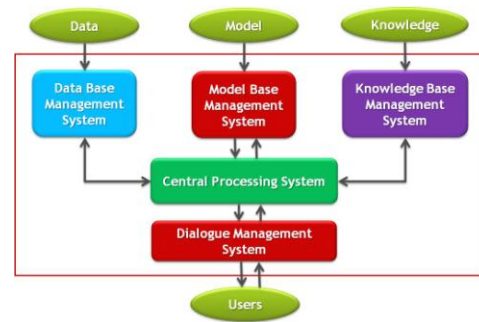


Figure 2. Executive Intelligent Information System (EIIS)

CONCLUSION REMARKS

CK industry in the field of agriculture policy seems inevitable, due to the conflicts of various political and economical interests. Therefore CK-wall must be designed properly to protect agriculture policy process, especially which has severe impact to poor farmers and rural areas. The CK-proof could be constructed with extensive research followed by designing its protocol method for supply and demand forecast of selected commodities.

It was suggested that Ministry of Agriculture should set up the Executive Intelligence Information System (EIIS) network as preemptive measure against CK infiltration.

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