

Deception with Purpose: Pepsico's Water Claims in India

By India Resource Center and Community Resource Centre
November 30, 2011

Pepsico, one of the largest food and beverage companies in the world, has begun claiming that it has achieved "positive water balance" in India, that it is "Giving Back MORE WATER Than We Take".

Wonderful as it may sound, Pepsico's claims of achieving "positive water balance" simply do not add up.



Pepsico's Claim on Aquafina Bottled Water Label in India

*Giving Back MORE WATER Than We Take
We call it "Positive Water Balance". To help
save a precious resource that is fast depleting in
India. Through rain-water harvesting,
community water-sheds, and water conservation
in agriculture, we at PepsiCo India saved 836
million litres* more water than we consumed in
2009.*

*To know more, log on to
www.tomorrowbetterthantoday.com*

**As confirmed by an independent audit*

The India Resource Center approached Pepsico in 2010 to question them on how it accounted for its claim of "positive water balance."

We were provided with an [audit](#) conducted by Deloitte Touche Tohmatsu India Private Limited, a firm that provides "audit, consulting, financial advisory, risk management, and tax services to selected clients." The audit was based on 2009 figures provided primarily by Pepsico, and the audit was released in 2010. This was followed by two rounds of questions from our end and Pepsico's responses.

Our request in 2011 to obtain the latest audit went unanswered.

Pepsico's claims of having achieved "positive water balance" in India, and Deloitte Touche Tohmatsu's assurances, are misleading and do not stand up to scrutiny.

Pepsico's claims on water in India are designed primarily to manage the business and reputational risks that the company faces with regard to its water usage in India and globally.

Pepsico is on a fast track to manufacture an image of itself as a global leader in water conservation, and Pepsico's claims of returning more water than they use is a public relations exercise by the company to blunt the growing and real criticism of its water management practices in India and elsewhere.

It is also astonishing that Pepsico has chosen one of the relatively more water stressed areas of the world – India – to claim to have achieved "positive water balance" and yet it has failed to do so anywhere else, including relatively more water "healthy" countries such as Canada, Norway and even the US, its home country.

Communities across India have powerfully challenged the operations of beverage companies such as Pepsico and Coca-Cola. One of Coca-Cola's largest bottling plants, in [Plachimada](#), has been shut down since 2004 and other Coca-Cola bottling plants in [Kala Dera](#) and [Mehdiganj](#) are facing considerable pressure for unsustainable water practices. To deflect attention from the growing campaigns, Coca-Cola has also claimed, from time to time, that they too have become "[water neutral](#)" in India, even though they are well aware that it is practically impossible to do so.

It is in this context – the growing scrutiny and pressure being placed on beverage companies' unsustainable water usage in India and globally – that Pepsico's claims of having achieved "positive water balance" needs to be viewed.

Claims of "positive water balance" as in the case of Pepsico and "water neutral" in the case of Coca-Cola are business and reputational risk management maneuvers, assisted by risk management companies such as Deloitte Touche Tohmatsu, and implemented through sophisticated public relations efforts to "bluewash" the company's image.

Pepsico's claims of "positive water balance" fail for a number of reasons, some of which are detailed below.

1. Pepsico Severely Understates the Amount of Water it Uses in India

The audit assuring that Pepsico had achieved "positive water balance" stated that Pepsico used or counted as "debit" 5168 mml of water (or 5.168 billion liters) in India in 2009. And Pepsico claims to have saved or counted as "credit" 6004 mml of water (6.004 billion liters) in 2009, hence a positive balance of 836 million liters.

However, Pepsico is responsible for using much, much more than 5.168 billion liters of water in India.

Pepsico only added up the water used in their beverage and food factories, and such a measure is completely inadequate for measuring a companies' water impact or footprint.

And Pepsico should know.

In our communication with Pepsico, they stated that they were a "sponsoring partner" of the Water Footprint Network, an initiative that looks at the water use and water footprint of companies' by examining the water used in the supply chain of the company's products.

As an example, Pepsico procured at least 75,000 tons of potatoes in India¹ – through contract farming alone where farmers are contracted by Pepsico to grow certain varieties of potatoes – ostensibly to manufacture Lays potato chips and other products.

According to the Water Footprint Network, it takes 291 liters of water to make 1 kilogram of potatoes in India.²

As a result, it takes 21.82 billion liters of water to produce 75,000 tons of potatoes that Pepsico used in India. And yet, Pepsico reports using only 5.168 billion liters of water in India, about 4 times less.

It is crucial to recognize the "addition" of Pepsico's water use through potato use in India.

If Pepsico did not contract the farmers to produce the 75,000 tons of potatoes it needs for its products, would there have been an additional 21.82 billion liters of water used to produce potatoes? We think not.

Pepsico is responsible for the additional 21.82 billion liters of water used in the agriculture of its potatoes, and Pepsico MUST also add the 21.82 billion liters of water in its "debit" or water that it uses column.

The magnitude by which Pepsico has understated its water impact, or water that it is responsible for using in India, gets even worse.

Pepsico uses great amounts of cane sugar in its beverages in India. Sugar, after all, is one of the primary ingredients for the bulk of their beverages in India.

Although we have been unable to ascertain exactly how much sugar Pepsico uses in India, Pepsico is the second largest domestic consumer of

Estimating Pepsico's Sugar Use in India

Pepsico is the second largest domestic buyer of sugar in India, second only to Coca-Cola and followed by ITC.

Coca-Cola, the largest purchaser of sugar in India, procures about 250,000 tonnes of sugar annually.³

ITC, India's third largest domestic sugar buyer, used 86,921 tonnes of sugar in 2010.⁴

As the second largest buyer of sugar in India, Pepsico must procure between 86,921 tonnes and 250,000 tonnes of sugar.

sugar in India (after Coca-Cola).⁵

From our research, we can estimate that PepsiCo uses at least 90,000 tonnes of sugar annually.

It takes about 2,374 liters of water to make 1 kilogram of refined sugar in India, according to the Water Footprint Network⁶, the initiative that PepsiCo claims to be a "sponsoring partner" of.

As a result, PepsiCo is responsible for 214 billion liters of water used in production of sugar alone used in its products. And yet, PepsiCo reports using only 5.168 billion liters of water in India, about 40 times less.

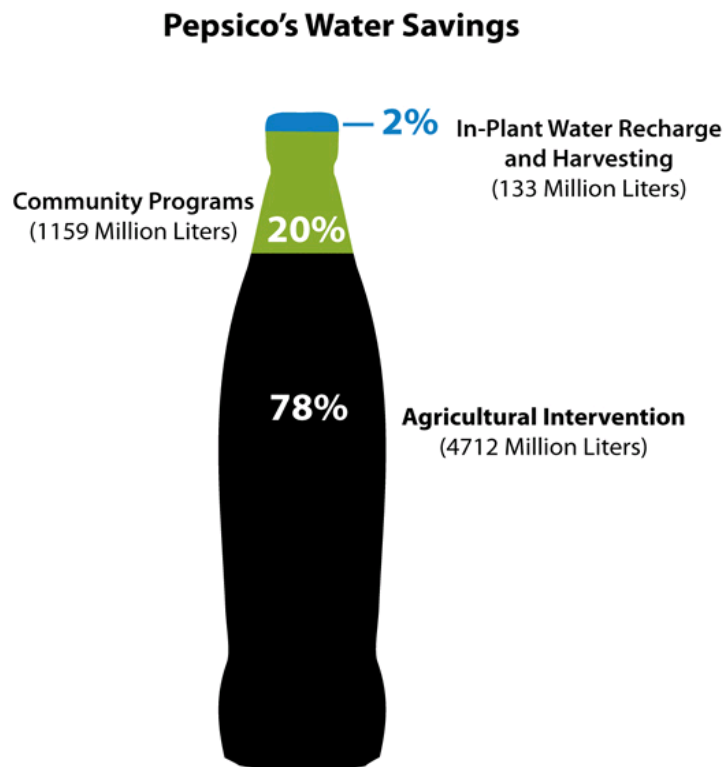
There are other components of PepsiCo's products in India, such as oats, oranges and rice, to name a few, and the water used in the production of these components must also be included in the water debits column – the amount of water PepsiCo is responsible for in India.

PepsiCo has significantly understated its water use in India and it must account for the water footprint of its products in India before it can begin to lay claim to having a "positive water balance."

2. PepsiCo's Water Balance Accounting: Counting Apples and Oranges?

Even as PepsiCo has failed to take into account the water used in their supply chain as "debits", PepsiCo readily accepts credits from outside their factories, and agriculture in particular – when it comes to taking "credit" for water saved.

According to the audit, 78% of the water "credits" that PepsiCo uses in its accounting for "positive water balance" comes from "saving through agricultural intervention".



Credit: Nadia Khastagir, India Resource Center

On the one hand, Pepsico refuses to take into account the amount of water used in the agriculture of the components in their products as debits. Yet, at the same time, Pepsico readily accepts credits for saving water in agriculture for products that are not part of their supply chain.

This is junk accounting based on flawed logic on the part of Pepsico.

Pepsico either needs to compare the water used in its factories with the water saved in their factories, or compare the water used in their supply chain (a vastly more appropriate measure) with the water saved in their supply chain, to assess its water balance.

Pepsico has significantly understated its water usage in India while accounting for its "positive water balance", and at the same time it has significantly overstated the amount of water saved by Pepsico itself.

Incidentally, Pepsico does know how much water is used in producing a bottle of Pepsi in India – the water footprint.

Pepsico repeatedly refused to share the water footprint of its products with us, even while admitting that "we have internally calculated the water footprint of some of our core products."

According to the Water Footprint network, it takes 442 liters of water to make one liter of PET-Bottle Sugar-Containing Carbonated Beverage using cane sugar in India.⁷

Paying Others to Reduce Water Use.....And Claim It as Water Saved by Pepsico

4.7 billion liters of water that Pepsico says it "saved", or 78% of the total water it claims as "credit" in the audit, comes from their promotion of Direct Seeding among farmers in paddy fields in India (as opposed to transplanting method). Pepsico has paid for the entire "agricultural intervention", including the seeds, the seeding machine and consultancy.

Pepsico itself has NOT reduced its own water usage along its supply chain to claim these credits. Instead, Pepsico has paid for others to save water – and used that "saved" water to claim that Pepsico has saved water, and therefore Pepsico should be credited positively towards its water balance.

78% of Pepsico's water savings come from such a disingenuous intervention and accounting.

Although Direct Seeding decreases water use in paddy farming by 16% when compared to transplanting, Direct Seeding also requires more herbicides and pesticides and for this, "PepsiCo recommends use of post-emergence herbicides manufactured by reputed companies like Bayer CropScience, Dupont India and Pesticide India." Direct Seeding also requires more diesel, according to a study provided to us by Pepsico.

3. Water Issues are Local Issues – Pepsico Doesn't Get It

Water issues are local issues. Once cannot deplete an aquifer in Town A, then recharge groundwater in Town B located 500 miles away, and say that everything is balanced. Town A's aquifer will remain depleted until that particular aquifer is recharged, locally, at the watershed level.

There can be no realistic expectations of "water balance" if the vast majority of the water-savings being conducted lies outside the watershed where the water is extracted or used.

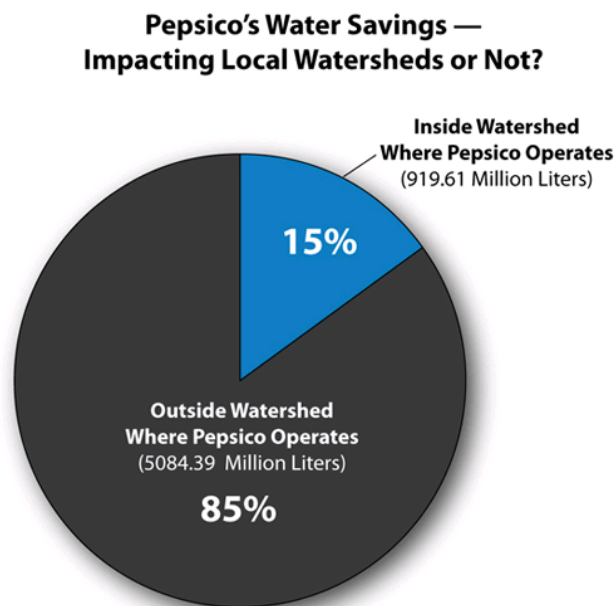
Even though Pepsico's public relations officials state that they recognize this important aspect of water, their actual practice in India reflects otherwise.

Only 2% of the water "credits" (water saved) by Pepsico, according to the audit, came from "in-plant water recharge and harvesting."

To further clarify, although Pepsico takes credit for "giving back" 6 billion liters of water in 2009, only 133 million liters of it was done in their own plant.

The vast majority of the water "credits" that Pepsico claims in its audit are outside the watershed in which its factories are located.

When asked how many of the community initiatives that Pepsico listed for water credits in 2009 were in the same watershed as the Pepsico factory, Pepsico named just two – in Paithan and Neelamangala. That is 2 plants out of a total of 42 Pepsico plants in India.⁸



Credit: Nadia Khastagir, India Resource Center

Despite the grand claims made by Pepsico, the reality is that their water conservation projects in India make minor contributions to "offset" their water use, if any at all.

This is because Pepsico has located the vast majority of its water conservation projects outside the watersheds in which they operate.

There is nothing "positive" or "balanced" about such an irresponsible practice, and their claims of "positive water balance" makes a mockery of the fundamental principles of water stewardship.

4. One in Four Pepsico Plants Operating in Water-Stressed Areas in India

A primary measure of a company's water management practices and whether it is sustainable is to examine whether the company is operating in areas that are already water-stressed. Operating water intensive plants such as beverage plants in water-stressed areas significantly worsen the already existing water stresses.

While Pepsico is trying to manufacture a positive image through its "positive water balance" branding exercise, the company's claims ring hollow when one examines where many of Pepsico plants in India are located.

Of the 34 operating Pepsico plants in 2009, 9 plants were located in areas that the government of India has classified as water stressed (semi-critical, over-exploited and critical).

To put it in perspective, more than 25% of Pepsico plants in India are located in areas where the community faces challenges accessing water because the area's water resources are stressed.

Pepsico's operations in such water stressed areas place tremendous pressure on the already stressed water resources, further hindering the community's access to water, including potable water – a fundamental human right.

This is hardly a picture of a company that claims to have a positive relationship with water.

To add insult to injury in water stressed areas, it is typically in the summer months when water availability is most difficult. And it is exactly in the summer months that companies such as Pepsico reach their peak production capacity – using the most water, particularly in the bottling plants.

Operating bottling plants in water stressed areas exponentially increase the water problems in the summer, making stressed water conditions significantly more pronounced.

Pepsico may lay claim to have achieved "positive water balance". But the reality on the ground is that Pepsico operates more than 25% of its plants in water stressed areas. Such a track record debunks Pepsico's claims of "positive water balance".

Pepsico should not operate bottling or food processing plant in a water stressed area.

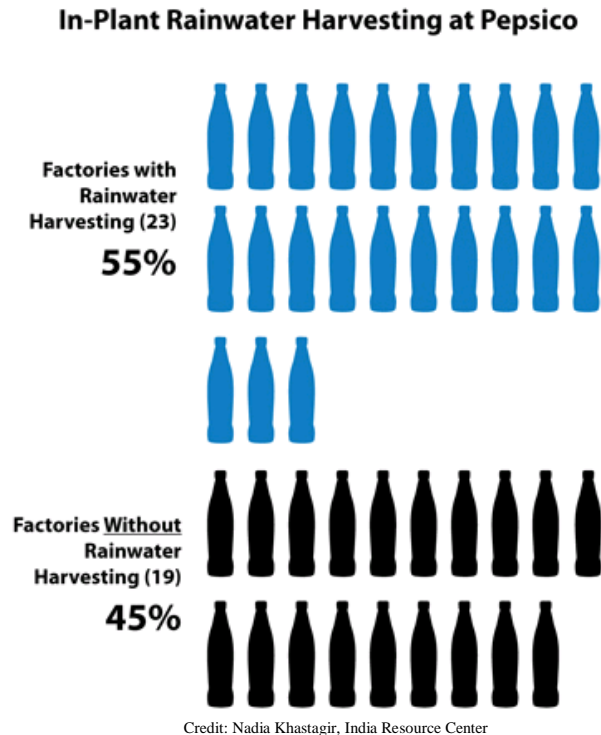
Pepsico Plants in Water Stressed Areas

| Plant Location | Category |
|----------------|----------------|
| Nelamangala | Over exploited |
| Panipat | Over exploited |
| Bharuch | Semi critical |
| Sangareddy | Semi critical |
| Chopanki | Over exploited |
| Delhi | Over exploited |
| Phillaur | Over exploited |
| Jodhpur | Critical |
| Kosi | Semi critical |

5. PepsiCo Lacks Commitment to Local Water Stewardship

Our contention that PepsiCo's "positive water balance" claims are more of a business and reputational risk management exercise and "bluewash" rather than a genuine effort at

finding water balance are further strengthened by what we established as PepsiCo's lack of commitment to replenishing local watersheds where they operate.



It was indeed surprising to find out from our communication with PepsiCo that the company did not have rainwater harvesting structures installed at all its factories in India.

Not only that, but according to PepsiCo itself, only 23 of the 42 plants in India had rainwater harvesting structures.

We find this to be highly unethical and unprofessional on

the part of PepsiCo, a company that uses hundreds of billions of liters of water around the world annually.

Having rainwater harvesting structures in only 55% of their plants is reflective of PepsiCo's lack of commitment towards maintaining the health of the local watersheds where it operates.

Rainwater harvesting is a cheap, simple yet effective way to conserve water and recharge the watershed – local water stewardship. It is, in fact, a rather elementary yet essential practice in this day and age.

Even the government of Delhi has made it mandatory for many new structures to have rainwater harvesting, including all new buildings on plots of size 100 square meters and above.⁹

Any company genuinely interested in and committed to replenishing water resources would, at a minimum, have rainwater harvesting structures in place at all their factories.

6. Quality of Water As Important As Quantity

Pepsico does not mention the wastewater it generates while accounting for its "positive water balance" in its audit.

Yet, from our communication with Pepsico, we were able to ascertain that Pepsico treated (and therefore generated) 2.56 billion liters of water in 2009, while they claim they used 5.168 billion liters of water in their plants.

In other words, Pepsico converted half of the freshwater they used in their factories into wastewater.

Healthy watersheds are not just about quantity of water – quality of water is equally important. What is the use of water if large amounts of it are contaminated and unfit for drinking, farming, cooking, bathing and cleaning?

At the very least, Pepsico should account for the 2.56 billion liters of wastewater it generated in its plants when accounting for its so called "positive water balance".

Pepsico Converts Half of the Freshwater it Uses in its Factories into Wastewater



Credit: Nadia Khastagir, India Resource Center

And Pepsico must also explain how it "offsets" the 2.56 billion of wastewater that it generated in 2009 before it can even begin to lay claim to having a "positive water balance."

7. Choice of Auditor – More Questions Raised Than Answered

The choice of Deloitte Touche Tohmatsu as competent auditors for verifying water management practices of Pepsico is an unusual choice.

The Executive Summary of the audit, upon first reading, reads as if it were written by Pepsico itself, allowing for statements beyond the scope of the audit itself.

Consider, for example, the introductory paragraph in the Executive Summary:

"It is a highly water intensive sector and is generally a popular target of critics portraying it as a major source responsible for water

depletion. PIHPL is committed to minimize its water footprint through greater efficiency across all its operations....."

PIHPL refers to Pepsico India Holdings Private Limited.

After our queries, it was established that the Executive Summary of the audit was written by Deloitte Touche Tohmatsu.

It was beyond the scope of the audit to assess whether Pepsico was a "popular target of critics" and such a broad statement should not find mention in the Executive Summary. Similarly, the statement that "PIPHL is committed to minimize its water footprint through greater efficiency across all its operations" is an assertion that we have debunked, and even if we had not, was not included in the scope of the audit. In fact, Pepsico and the audit hardly considered the water footprint across all its operations in India.

Such sweeping statements written by Deloitte Touche Tohmatsu indicate a positive bias towards Pepsico which was not arrived at as a result of the audit because assessing such attributes were beyond the purview of the audit.

Limited Assurance or Reasonable Assurance?

It is not clear from the audit whether Deloitte Touche Tohmatsu has provided Pepsico with a **Limited** or **Reasonable** Assurance on its Positive Water Balance under the International Standard on Assurance Engagements 3000 (ISAE 3000).

Limited Assurance are less stringent than Reasonable Assurance.

"The limited assurance procedures engagement excludes procedures such as testing of source data and operating effectiveness of controls and is substantially less in scope than a reasonable assurance engagement," according to Deloitte LLP on Pepsico UK website.¹⁰

To further clarify the difference between limited and reasonable assurances, Deloitte LLP writes:

"A reasonable level of assurance is similar to the audit of financial statements; a limited level of assurance is similar to the review of a six-monthly interim financial report."¹¹

Since there is a considerable difference between providing Limited Assurance and Reasonable Assurance, we are unable to understand why the type of assurance granted was not mentioned in the Deloitte Touche Tohmatsu audit on "positive water balance".

In the UK instance, Deloitte LLP was hired to "perform limited assurance procedures on selected health and wellness performance data for the year ended 31 December 2008," and it is clearly stated as such.

However, in the Deloitte Touche Tohmatsu audit on Pepsico's "positive water balance", nowhere in the term "Limited" used anywhere in the audit, and the title of the audit reads "Assurance Services on "Positive Water Balance" to PepsiCo India Holdings Pvt. Ltd"

If Deloitte LLP feels it necessary to clarify the limited nature of the assurance being given to Pepsico in the UK, why does not Deloitte Touche Tohmatsu also apply the same standard to an audit concerning Pepsico's operations in India? Surely there are not different standards for reporting audits conducted in the UK and India?

Inadequate Audit

Through our communication with Pepsico, it was made clear to us that Deloitte Touche Tohmatsu:

- Did not test the efficacy of any of the water conservation projects reviewed because, "Testing the efficacy of the systems is beyond the scope of the practitioner."
- Did not conduct any tests in the fields where Pepsico took them and generated none of its own data. As Deloitte Touche Tohmatsu India Private Limited (DTTIPL) responded to our queries,

"It may please be noted that DTTIPL has not undertaken any field test on the water saving or generated any such data on their own during their field visits. DTTIPL has verified PepsiCo's data and the processes that had been put into place by PepsiCo. DTTIPL relied on the supporting documentations that were provided by PepsiCo, as and where required and has considered only those figures of water savings which PepsiCo could prove through authentic documents/recording procedures."

- Relied primarily on data provided to them by Pepsico to provide the assurance that Pepsico had achieved "positive water balance" in 2009.

We find not only the choice of Deloitte Touche Tohmatsu problematic to provide such an assurance, but also what Deloitte Touche Tohmatsu did **NOT** do in order to provide the assurance.

Deloitte Touche Tohmatsu may worked within the ISAE 3000 guidelines to provide the (Limited) assurance of "positive water balance" to Pepsico but the fact still remains that:

1. No tests were conducted to examine if the water conservation projects listed by Pepsico actually worked.
2. No tests were conducted to generate independent data to verify Pepsico's claims of water savings.
3. All data used in order to verify Pepsico's claims (with the exception of stakeholder engagement) were provided by Pepsico themselves.
4. Pepsico paid Deloitte Touche Tohmatsu for conducting the audit.
5. It was not made clear that a Limited Assurance was being granted, not a Reasonable Assurance.

Such an assurance is not an independent or fact-based audit of Pepsico's accounting for its claims of having achieved "positive water balance."

Conclusion

It is indeed disturbing that one of the largest food and beverage companies in the world resorts to such deceptive claims – on purpose.

Pepsico has not achieved "positive water balance" in India. Pepsico does not give back more water that they take. Far from it.

Pepsico has understated the amount of water it is responsible for in India and it has taken credit for saving water by paying others to do it outside their supply chain and often outside the watershed in which they have an impact – having minimal impact, if any, on "offsetting" their water use.

Although it is desirable that businesses be part of solution to address the growing water crisis, starting with such preposterous claims as made by Pepsico, right off the starting block, is not the way to go about it.

Companies such as Pepsico must first admit that they are part of the problem, and in this they have completely failed.

Pepsico's claims of "positive water balance" makes a mockery of the science and logic behind water stewardship. It also insults the Indian public by making claims that are erroneous, misleading and deceptive.



Pepsico Franchisee Plant in Water Stressed Phillaur, Punjab Where Water Usage Restrictions Have Been Placed on Farmers Due to Rapidly Deteriorating Water Conditions

It is clear to us that for Pepsico's management, establishing itself as a company having a healthy relationship with water, however superficial, is essential to its existence.

Their claim of "positive water balance" aims to give Pepsico the "right" to use "positive" or additional water, much needed as it plans aggressive expansion in India – while not doing anything substantial to conserve water themselves.

We refuse to accept such logic and practice.

It is only a matter of time before the conflicts between the wanton mismanagement of water resources by junk food companies such as Pepsico and the genuine water needs of the communities and farmers escalate even further.

India has already been the battleground for such conflicts for close to a decade now. As a result, both Pepsico and Coca-Cola are on a fast track to manufacture an image of themselves as water stewards – from a business and reputational risk management perspective.

Pepsico's claims of having achieved "positive water balance" are just that – a public relations exercise to "bluewash" its image and to reassure their shareholders and consumers that everything is moving smoothly in India and that any and all risks have been addressed.

It is also a disingenuous way to try to ensure that Pepsico has somehow earned the "rights" to use water in an increasingly water restrained India.

Pepsico's claims of having achieved "positive water balance" in India sink when subjected to scrutiny.

Pepsico's claims are an act of deception – with purpose.

¹ Gokhale, Ketaki, "Questions & Answers: Vivek Bharati of PepsiCo India", *The Wall Street Journal*, October 28, 2009. <http://online.wsj.com/article/SB125654509123607711.html>

² Mekonnen, M.M. and Hoekstra, A.Y. (2010) The green, blue and grey water footprint of crops and derived crop products, Value of Water Research Report Series No.47, UNESCO-IHE, Delft, the Netherlands. <http://www.waterfootprint.org/downloads/Report47-Appendix-II.zip>

³ "Towards Sustainability, Environment Report 2007-2008", Coca-Cola India. http://www.thecoca-colacompany.com/citizenship/pdf/india_env_rpt.pdf

⁴ "ITC Annual Report, Raw Materials", Moneycontrol.com, March 2011. <http://www.moneycontrol.com/annual-report/itc/raw-materials/ITC>

⁵ Bloomberg, "India may turn sugar importer", *Financial Express*, August 20, 2011. <http://www.financialexpress.com/news/India-may-turn-sugar-importer/834431/>

⁶ Mekonnen, M.M. and Hoekstra, A.Y. (2010) The green, blue and grey water footprint of crops and derived crop products, Value of Water Research Report Series No.47, UNESCO-IHE, Delft, the Netherlands. <http://www.waterfootprint.org/downloads/Report47-Appendix-II.zip>

⁷ Ercin, A.E., Aldaya, M.M. and Hoekstra, A.Y. (2011) Corporate water footprint accounting and impact assessment: The case of the water footprint of a sugar-containing carbonated beverage, *Water Resources Management*, 25(2): 721-741.

⁸ Of the 42 plants, Pepsico claims 8 were not operational in 2009.

⁹ "Frequently Asked Questions on Rain Water Harvesting", Department of Delhi Jal Board, Government of NCT of Delhi, May 11, 2010.

¹⁰ Assurance statement from Deloitte, Health Report 2010, PepsiCo UK, November 6, 2009.
<http://www.pepsico.co.uk/purpose/health/health-report-2010/scope-boundaries-and-assurance/assurance-statement-from-deloitte>

¹¹ Ibid.