

Status of fertilizer production and factories in Bangladesh

MOHAMMAD SABER ALI

IN 1898, Sir William Ramsey, discoverer of the inert gases, predicted the depletion of the world supplies of fixed nitrogen. In view of the rapidly rising population and increasing intensity of agriculture, he anticipated world disaster due to a fixed nitrogen famine by the middle of the twentieth century. Thanks to Fritz Haber, a great German scientist, that this did not happen due to his method of fixing nitrogen by reacting it with hydrogen to give ammonia. The universe is surrounded by atmosphere of air of which 79 percent consist of Nitrogen but the plant kingdom cannot absorb it from the free atmosphere directly and Ammonia injection in soils in cold countries and Urea addition tropical countries in soil was the most advancement achievement in human history to feed the hungry people by boosting up agriculture production to a large extent.

Bangladesh is now facing acute crisis of Natural Gas shortage. The Fertilizer and Power Plants are facing seasonal or complete shutdown putting the country in the grip of possible acute power and Fertilizer shortages in future.

The world economy has experienced financial turmoil followed by slump in growth with intermittent recovery during the past four years. The global grain supply-demand balance in the 2012/2013 marketing season may tighten significantly as a result of an anticipated fall in production of wheat and coarse cereals. World fertilizer nutrient (N+P2O5+K2O) consumption was estimated to reach 180.1 million tons in 2012, up by 1.9 percent over 2011. World demand for total

fertilizer nutrient is estimated to grow at 1.9 percent per annum from 2012 to 2016. The demand for nitrogen, phosphate, and potash is forecast to grow annually by 1.3, 2.0, and 3.7 respectively during the period. Over the next five years, the global capacity of fertilizer products, intermediates and raw materials will further increase.

The world nitrogen fertilizer demand increased from 108.2 million tons in 2011 to 109.9 million tons in 2012, at a growth rate of 1.6 percent. It is expected to be around 116.0 million tons in 2016 at the annual growth of 1.3 percent. Of the overall increase in demand of 6 million tons nitrogen between 2012 and 2016, 60 percent would be in Asia, 19 percent in America, 13 percent in Europe, 7 percent in Africa and 1 percent in Oceania. Among the Asian countries, the bulk of the increase of world demand for nitrogen is expected in India (30 percent) and China (7 percent), followed by Pakistan (6 percent), Indonesia (5 percent), Bangladesh (3 percent), Vietnam (2 percent) and Malaysia (1 percent).

Supply of fertilizers are closely linked with food growth in the country and any shortage of fertilizer should be replenished by foreign import which is largely dependent upon country's available logistics infrastructure and bulk fertilizer movement control. Solid handling is a very difficult task and bulk shipment of urea, say 2.6 million tons is extremely difficult to schedule and fix ship duration of stay in unloading jetties of ocean going ships and bagging bulk urea from ship maintaining in the stipulated anchor time. Otherwise, high demurrage in foreign currency shall be very high to digest. Another difficult task shall crop up to ensure the

correct weight of 50 kg of each bag and also to control various logistics activities. The urea in the present world is sold as a bulk material and pre-bagged urea though convenient for immediate domestic dispatch, may be too costly to bear when we are to import a large quantities.

With the growing price hike of bulk granular urea including freight cost of urea is increasing higher and higher and cumulative per ton of urea cost shall be substantially high within next five years.

Country needs currently about 2.6 million tons of fertilizer per year. The in-house production of BCIC is hardly 1.0 million tons and the production rate is rapidly diminishing due to the lack of proper maintenance for the last two decades, exodus of experienced people, lack of human planning and above all aging of plants and obsolete technology.

KAFCO plant also suffering from acute gas shortage and the country is being deprived of efficient and constant supply of Urea with minimum transport cost. (KAFCO's productivity is very good and reliable at country's need).

The on-going Shahjalal Fertilizer Factory (gas is available in that region) is expected to go for production from next June-2015. This may slightly ease the situation but again the lower productivity of the existing BCIC plants including KAFCO (due to gas shortage) shall not improve the over-all situation abruptly.

BCIC did not consider the requirements of revamping of the existing units, which would have been lucrative and most cost effective, and the installed capacity of the existing plants could have been increased considerably and the existing plants effective lives could have been increased at the same time. Many old plants of the world have increased

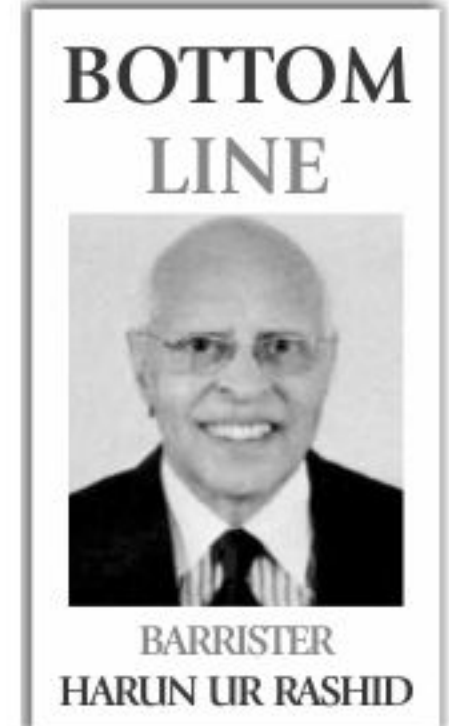
the plant capacity and reliability through effective revamp options. India, our neighbor, has made considerable success in revamping a good number of Ammonia-Urea plants and also subsequently increasing the productivity and reliability of the plants and recovered the expenses within 2-5 years. Still Bangladesh can explore this possibility to get benefit of extra production at a cost effective revamp investment. While carrying out revamp options the owner must be in the driving seat and the pay off time may not exceed 5-6 years. This measure shall control the overall expenditure of the revamp activities and shall make the investment lucrative.

The existing BCIC plants, UFFL and PUFF are very old and running with obsolete technology and consuming excess amount of natural gas and running with lower productivity. BCIC can think now of making a new energy efficient Ammonia-Urea plant scrapping the existing two obsolete plants. BCIC can expect to have almost double the quantity of Urea with a new modern Ammonia-Urea plant with the same consumed gas quantities.

Apart from considering the revamp options and revamp activities of the existing fertilizer plants of the existing sick plants we have to think seriously regarding the alternate available raw materials for Fertilizer Productions in the country. The prospect of utilizing natural gas further for Ammonia, Urea production is bleak and now it is proper time to search for the alternative raw materials for Fertilizer production in the country. Coal is the optimum choice for Synthetic Natural Gas (SNG), which can make our country in self-sufficiency in Fertilizer Production as well as in Power Generation.

The writer is CEO, Universal Process Engineering

Dimension of Bangla-US security dialogue in Dhaka



BARRISTER HARUN UR RASHID

THE 21st century is as exciting as it is full of unpredictable events and dangers. Most of the dangers arise from global changing pattern of security, both traditional and non-traditional.

Given the background, the third dialogue on security with the US which was held yesterday (22nd April) in Dhaka assumes importance. The main purpose such dialogue is to increase cooperation with

the US in the areas of, among others, counter-terrorism, border security, joint military exercises and training including preparedness for natural disasters.

The acting assistant secretary of the state bureau of political-military affairs led the US delegation at the dialogue while Bangladesh delegation was led by the secretary (bilateral) of the Ministry of foreign affairs.

It is noted the second bilateral security dialogue was held Washington on 9th April 2013 and the first one took place in Dhaka on 12th April, 2012. Bangladesh faces various security issues relating to: (a) ideological based terrorism or political terrorism, (b) illegal flow of weapons from abroad, (c) natural disasters and (d) land and maritime borders.

The terrorists represent an extreme ideological views, are shadowy figures and not identifiable with any state. The terrorists could be a part of multinational network or homegrown and are engaged in largely clandestine work and when they want to disrupt normal events or lives, they brook no limits on their power of destruction on innocent persons.

For example the August 21 2004 dastardly grenade attack which was an attempt on the life the current Prime Minister Sheikh Hasina has been a grim reminder of how much destruction the terrorists could inflict on the unsuspecting individuals.

Second security threat emanates from the flow of illegal weapons and ammunitions to Bangladesh. For example, the incident of the 10-Truck Arms and Ammunition Haul which took place at a jetty of Chittagong Urea Fertilizer Limited (CUFL) on the Karnaphuli River on the early hours of 2nd April 2004 is believed to be the largest arms smuggling incident in the history of Bangladesh. (In January 2014, the court handed death penalty to 14 including then two ministers for smuggling truckloads of firearms).

The third security threat comes from the frequency of natural disasters which has increased in Bangladesh due to impact of global climate change. Although they can not be prevented, they can be managed through increasing the capacity of community preparedness with latest technologies.

The fourth security threat arises having porous land border and open seafloor, such as gunrunning, illegal human and drug trafficking, and piracy and spilling oils by foreign vessels in the Bangladesh maritime waters.

It is noted Bangladesh's direct access to Indian Ocean is strategically and commercially important because 90% of GNP depends on sea trade and almost 100% of Bangladesh's energy requirement in terms of fuel arrives by sea from the Middle East.

The two sea lines of Communication (SLOCs) connected with two sea ports at Chittagong and Mongla act as vital trade links. Thereby any sort of disruption to these SLOCs will have a disastrous effect on the national economy.

Furthermore, the marine areas need to be protected because they are a great source of food, renewable energy and raw minerals. Besides, numerous forms of life live in the sea which could become one of the potential sources of food in future for the population of the country.

Although Bangladesh government since 2009 has been able to root out largely the terrorist elements from the soil of Bangladesh and has effectively addressed money laundering and strengthened vigilance and monitoring of land and maritime borders, Bangladesh further needs maximising human and natural resources in pursuing cooperative policies to address the security issues with countries in the region and beyond.

The US is deeply interested in the security dialogue with Bangladesh for strategic reasons. Bangladesh shares borders with rising India and reformist Myanmar and its interactions with both of them are friendly and cooperative. Bangladesh is a near neighbour to China which has deepened its relations with Bangladesh. The country also physically interconnects between South and South East Asia.

On wider security, many strategists suggest that the US desires to constitute a kind of security (not military) alliance with India, Australia, Philippines and Japan to confront North East Asia's instability. It is better for the US if Bangladesh could be included in the loop.

The relationship between Bangladesh and the US has evolved from one of aid dependence to that of strategic partnership. Bangladesh needs to develop with the US a truly modern partnership, one that is practical, open and engaged to meet the global and regional challenges of the 21st century. The strength of the relationship relies on the capacity to adapt to changing circumstances for mutual benefits.

We live in an era of change due to the ongoing power shift and power diffusion. The balance of power is moving toward Asia-Pacific region. The pattern of alliance has changed and often countries look increasingly to regional or distant partners on political, strategic and security considerations. Bangladesh-US annual security dialogue is an instance in point.

The writer is former Bangladesh Ambassador to the UN, Geneva.

Budget 2014-15: Need for reforms in ADP

MAHFUZ KABIR

THIS year, the finance minister has already kicked off pre-budget discussions by formally indicating the size of the upcoming budget and holding several rounds of meetings with external stakeholders, viz. scholars and civil society. In fact, a budget of Tk. 2.5 trillion in the fiscal year 2014-15 would remain far behind the projection of Medium-Term Budgetary Framework (MTBF), which raises question of its credibility in terms of both forward baseline estimates and achievement of budgetary goals.

There are big challenges of attaining the growth target set in the Sixth Five-Year Plan and even in the outgoing budget. The World Bank's projection is even lower than the government's pessimistic projection, while we see a tug of war on revised size of Annual Development Programme (ADP). Indeed, ADP is widely regarded as instrumental to achieve higher growth, especially when large public investment is required to recover from political ravages in the last year. At the same time, we must reform through transition from traditional low-return ADP to a more systematic and high-impact multi-year public investment programme (MYPIP).

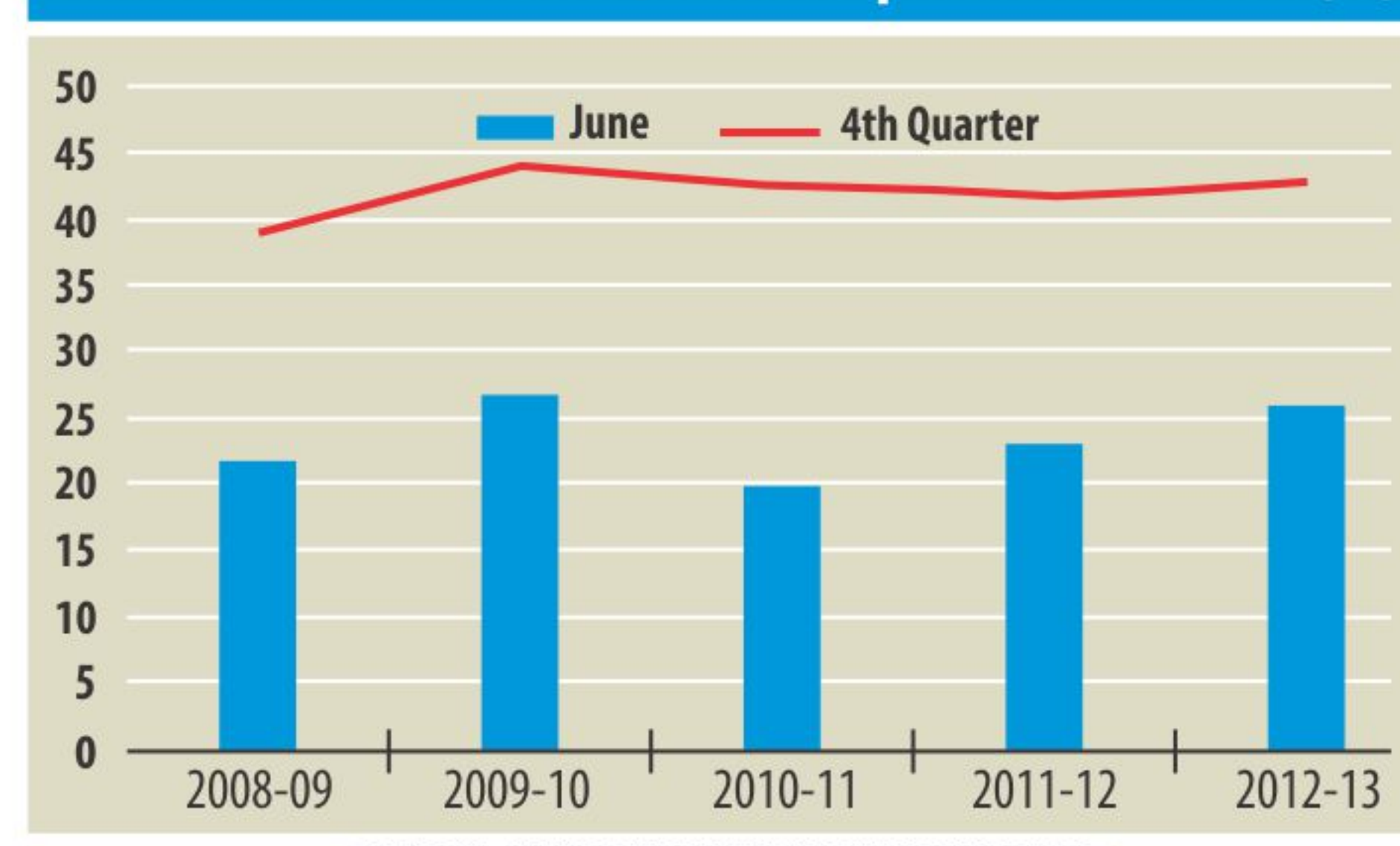
Why do we need an MYPIP although the projects are multi-year in ADP and the MTBF are also showing the individual projects by ministry, division and agency (MDA)? By now we have faced quite a lot of difficult questions on the consumption of resources, return, and disgrace of ADP that is even termed as a 'black hole.' What factors led to such a miserable performance of ADP over the years?

Three major elements can be identified by looking into it carefully. First, it has become a leviathan with a thousand projects approved and nearly eight hundred unapproved but kept in 'Green Pages' with possibility of getting green signal from Ecneac anytime in the fiscal year. There are quite a large number of projects coming in politically and with informal requests from many MPs as they cannot formally raise demand in ADP process for their respective constituencies. This creates an apparently 'inclusive' ADP but an unmanageable number of public investment projects.

Second, it failed to fully conceive the goals and targets of Outline Perspective Plan 2010-2021 (OPP) and Sixth Five-Year Plan 2011-2015 (SFYP) and therefore translates into relevant projects as inputs although in theory and on paper it is prepared in line with the government's strategic planning documents, including the OPP and SFYP.

Third, due to annual nature of allocation in line with resource envelope and expendi-

Chart: Rate of Fourth Quarter Expenditure of ADP (%)



SOURCE: BASED ON FINANCE DIVISION'S DATA.

ture targets, there is a rush at the end of every fiscal year, which may be termed as "the fourth quarter syndrome." For example, more than 40% of ADP was spent in the fourth quarter in the last three fiscal years while about a quarter of ADP was spent only in June alone. Coupled with alleged high prevalence of rent seeking and bribery within the apparatus, it leads to considerable wastage of public resources every year, which would have generated much higher return if they were prepared and implemented as MYPIP.

The idea behind an MYPIP is quite simple. If you feel that you need a house, then you will estimate your resource requirement rather than get incomplete parts of the house with high annual depreciations. After some years you find that there is no house at all but you have already spent hefty sum of money. This is exactly what is happening in ADP despite the fact that the country has set some sensible time-bound targets illustrated in 'Vision 2021.'

Currently, there is dual budgeting emanating from weak linkages between the ADP and MTBF due mainly to insufficient dialogue between the Planning Commission and the Finance Division. Inefficiency in resource allocation and project implementation is also a result of lack of a medium-term perspective in the ADP process. Since there is an absence of sectoral planning within the MTBF, the sector budgets are merely the sum of ministry-level projects that are mainly flagged by the planning wings of the ministries and divisions, and the objectives of the SFYP are

only weakly materialised through annual budgets. Surprisingly, there is no qualitative shift in development programming even though we are aiming at becoming a middle-income country by 2021 through double-digit growth. We are still dwelling in the frame set in the early-1970s with 17 sectors.

The MYPIP should be accompanied by adopting Sector Strategy Papers (SSP) to help coordinate between MDAs and deal with intra-sectoral linkages. The SSP can be spectral prioritisation tool guiding to populate the MYPIP. Currently, the SFYP provides limited guidance for effective prioritisation between and within sectors. In addition, line ministries should prepare their medium term strategic business plan (MTSBP) within the purview of SSP for large intra-sectoral linkages. These two should ideally serve as reference frameworks for assessing project proposals instead of the existing programmatic approach resulting in low return.

Such a structural reform in the ADP process is badly needed instead of traditional supplement of new projects, both in green and other pages, thereby leading to insurmountable tasks for the planning and monitoring agencies of the government. Such a change can be initiated only by inserting a paragraph in the upcoming budget speech, although the decision should come from the highest authority of the government. The vision document for an MYPIP can be introduced later on containing the structure, implementation strategy, required changes in the MDAs, and capacity development of the

Planning Commission and planning wings of the line ministries.

In addition, it requires a comprehensive document outlining the government's strategic vision, the strategic justification for such a transition, and timing and sequencing accompanied by a precise implementation plan. It will reduce uncertainty over the expected amount of resources and period of multiyear implementation. Besides significantly reducing the large number of small projects and the 'waiting list' approach of the Green Pages, it will be based on a results-oriented resource allocation, which would be introduced through rigorous prior assessment to lower risks and uncertainties related to expected return from large public investment. Second, the public investment would not suffer from low quality due to expenditure spikes in the fourth quarter, as well as in June.

Introducing a meaningful MYPIP crucially depends on close and effective cooperation between the Finance Division and Planning Commission, and there is a need for external support for greater coordination and preparation of Joint Budget Strategy Paper, and the roll out of the SSPs and MTSBPs. It will help ensure greater coordination and synchronisation in preparing the revenue budget and development programme.

The government should also initiate a structural reorganisation of the Planning Commission to establish it as the "core" planning institution. Its role should be redefined to provide strategic guidance to the ministries and formulate indicative plan according to national and sectoral priorities. The government should also strengthen the planning and financial management capacity of its staff through comprehensive formal as well as on-the-job training and capacity building. Also, the capacity of staff within planning wings of line ministries should be strengthened to reduce flow of 'junk' projects from personal influence of the political leaders.

Finally, there is a need for medium-term partnership between planning agencies (Planning Division of MoP and planning cells of LMs) and external stakeholders (think tanks and experts) for transferring skills and technology to strengthen the planning capacity of the government agencies. This would include, but not limited to, sectoral and economy-wide modelling, operations analysis and projections for supporting a meaningful reform of ADP.

The writer is an Economist and Senior Research Fellow, BISS, Dhaka. E-mail: mahfuzkabir@yahoo.com.

QUOTABLE Quote

Leave that which is not, but appears to be. Seek that which is, but is not apparent.

Rumi

CROSSWORD by Thomas Joseph

- ACROSS**
- Gushing review
 - Closes with a bang
 - Flair
 - Warsaw's nation
 - "Shane" star Alan
 - Car from a repair shop
 - Parent's warning
 - Singing Sandra
 - Trumpets' cousins
 - Important time
 - Neon or helium
 - Ran away
 - Indy auto
 - Small nails
 - Smell
 - Behold
 - Scary shout
 - Place to orders cones
 - Online address
 - Active
 - Cosine's reciprocal
 - Suffers
 - Wall Street worker
 - March time
 - Tale
 - Carnival attraction
- DOWN**
- Archaeology find
 - Texas landmark
 - Skywalker's father
 - Imperil
 - Breaks apart
 - Pillages
 - In the style of
 - South African hero
 - Showed scorn
 - Ran away
 - Is fearful of
 - Close
 - Outdoor atmosphere
 - Vigorous
 - Fans
 - Jazz fan
 - Thrash
 - Gate tender
 - Copier supply
 - Girl of the Alps
 - Gawked at
 - Marshal's group
 - Commotion

CRYPTOQUOTE

XPF FYI KOW, ANF FYI CUJEIF PC FYI RJUZ ZNKQ, UIGZB FYI CUPKQ FP CUW GXZ CPUUPR.

-- KYJXIBI

Yesterday's Cryptoquote: ALWAYS MISTRUST A SUBORDINATE WHO NEVER FINDS FAULT WITH HIS SUPERIOR.

-- JOHN CHURTON COLLINS

Yesterday's answer

SWIPES WIS P
CANADA ANTE
ENERGY TORN
NERVE RERAN
ESTE GORDIE
NERO END
BRUNOMARS
DEE JUST
ONFOOT LAST
NEEDY MARCO
AFRO WINDOW
TIER ACTONE
ETES NEARER

BEETLE BAILEY

THANKS FOR GIVING ZERO A PEP TALK, PLATO

NOW, HOW DO YOU TURN IT OFF?!

HENRY

DELIVER THIS HAT TO 497 LEONARD LANE HENRY!

497

by Mort Walker

8-7

by Don Trachte

8-6