

**Basic framework for higher education development
KPPTJP IV (2003-2010)**

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FOREWORD

The new paradigm in higher education requires a totally new approach where the issues of massive education, life-long learning, open learning, quality & relevance, accountability & autonomy, and equity become so important. The impact of globalization causes a shift of the role of higher education institutions from traditional learning institutions to knowledge creators, a change from random planning to strategic planning, and a movement from comparative approach to competitive approach. For a developing country such as Indonesia, there is a need to create a breakthrough for enhancing higher education development. It is no longer appropriate to conduct higher education programs as a business as usual.

Current achievement is shown by the rapid expansion of student enrollment and wider distributions of higher education institution establishments all over Indonesia. That was necessary for the initial growth of higher education development due to the increased demand of the community and people participation. When the capacity of the government to provide higher education service is limited then the participation of the private sector is welcomed, and there should be a complimentary action between the two.

Although Indonesia has shown a significant growth in higher education development, the critical mass of educated people is still far from adequate considering the size of the population, disparities among regions and, area of coverage. Therefore a great deal of efforts must be done in the accelerated manner to overcome the problem. The focus of the development is not only meant for the higher education institutions but also for the participants and even for the government, as their role in such development is increasingly important. The stakeholders should therefore consider higher education development of higher priority. The government intervention in higher education development is of course still very important, as we cannot leave it to the market. Relying solely on market forces could create more inequality and widen the gap between the rich and the poor.

In meeting the challenges of the globalization, Indonesian higher education development is implemented using the new paradigm where institutional autonomy and accountability becomes the strategic issue. It is expected that by 2010 Indonesia will have a competitive leverage due to the existence of highly reputable higher education institutions, and we believe that a strong higher education program will lead to a nation's competitiveness.

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Satryo Soemantri Brodjonegoro
Director General of Higher Education
Ministry of National Education
Republic of Indonesia

PART ONE: FRAMEWORK

I. Historical perspective

1. Higher education in Indonesia does not have a long history, since it was just started in the end of 19th century by establishing medical education for indigenous doctor in Jakarta. Before the Second World War the number of student was merely around 200. After the independence in 1945, the system has been significantly expanded, particularly after the Education Act in 1961 was enacted. Currently the system enrolled more than 3.5 million students.
2. In 1975 the first initiative to develop a national higher education policy was launched by developing the first Higher Education Long Term Strategy (KPPTJP) for the period of 1975-1985. The national system, comprising public and private sectors, emphasized on the aspect of relevance by recognizing the need to establish strong linkages with the regional and national development. In addition to the introduction of a dual system, consisting of academic and professional streams, 3 program levels in higher education were introduced, i.e. Diploma, Sarjana, and Graduate program. The organizational and management aspects were given serious attention through the introduction of credit system, student academic evaluation, student load, and staff promotion system [DGHE, 1975].
3. In 1986-1995, development was focused to consolidate previous achievement and improvement of quality. The economic downturn caused by the sudden drop of oil prices had prevented the student enrollment to further expand. Nevertheless, the enrollment in private sector was steadily expanded at the rate of 9% per annum. An early attempt to introduce reform in higher education by issuing a new Government Regulation (PP) 30/1990 did not achieved the expected outcome due to inadequate public and political support [DGHE, 1985].
4. The 3rd KPPTJP 1996-2005 was developed based on the assumption that the economy will grow steadily at the rate of 6-8% per annum as it was in the last 10 years. In order to meet the future needs and demand 3 major issues are identified, namely, the need of a more dynamic management mode in higher education to cope with the dynamic changes, the need to take quality and relevance as the basic reference for higher education development, and the need for enhancing social mobility and equity through higher education development. The strategy comprises the following three core programs [Soehendro, 1995],
 - a) implementation of the new paradigm in higher education management;
 - b) improvement of relevance and quality; and
 - c) geographical and social equity.Based on these 3 core programs, the main program categories and main programs are then developed.

5. All of a sudden, in 1997 East Asian countries, including Indonesia, experienced the worst ever economic crisis, followed by the fall of its political and social system. Between 1998 and 1999, the economy contracted by -13% and -1% respectively [World Bank, 2000]. The economic growth has only been crawling at 4% in 2002, and the previous growth of 7% enjoyed in the 1990s is not expected to revive in the next 3 to 5 years. The fall of the authoritarian government creates euphoria in almost every sector that the stability previously taken for granted is currently become a luxury. The centralistic approach taken by the KPPTJP III immediately becomes obsolete and cannot cope with these new types of challenges.
6. Meanwhile, a funding mechanism based on the new paradigm concept (the first core program) has been implemented since 1995 and the proportion of DIP allocated under this scheme has been increasing to 25% in 2002. All competitive funding schemes under this concept take improvement of quality and relevance (the second core program) as its primary objective. The third core program, expansion of enrolment to achieve geographical and social equity, however, does not meet the expectation due to the financial constraint.

II. Vision 2010

7. In order to contribute to the nation's competitiveness, the national higher education has to be organizationally healthy, and the same requirement also applies to institutions. A structural adjustment in the existing system is, however, needed to meet this challenge. The structural adjustment to be carried out aims to have, by the year of 2010, a healthy higher education system¹, effectively coordinated, demonstrated by the following features,

Quality:

- i. education that effectively linked to student needs, develop their intellectual capability to become responsible citizens, and contribute to the nation's competitiveness;
- ii. research and graduate programs serving as the incubators and the needs of an adaptable, sustainable, knowledge-based economy; and integrate state-of-the-art technology to maximize accessibility to and applicability of advanced knowledge;
- iii. a system contributing to the development of a democratic, civilized, inclusive society, meets the criteria of accountability as well as responsibility to the public; and
- iv. comprehensive financial structure nourishing participation of stakeholders (including local government), and is directly linking new investment with recurrent budget in the subsequent years.

¹ A system is defined as the entire higher education system in Indonesia, whilst each individual university (with various names and types) is defined as an institution.

Access and equity:

A system that provides opportunities for all citizens to a seamless learning process, inspiring and enabling individuals to develop to the highest potential levels throughout life, so that he/she can grow intellectually, well equipped for work, and contributes effectively to society, as well as achieve personal fulfillment.

Autonomy:

- i. decentralizing the authority from the central government and providing more autonomy as well as accountability to institutions; and
- ii. legal infrastructure, financing structure, and management processes that encourage innovation, efficiency, and excellence.

III. Basic policies

A The nation's competitiveness

8. The world is facing unprecedented challenges arising from the convergent impacts of globalization, the increasing importance of knowledge as an engine of growth, and the ICT revolution. Nation's competitiveness, which is defined as a country's share of world markets for its products, comes less and less from abundant natural resources and cheap labor, and more and more from technical innovations and creative use of knowledge, or a combination of both [Porter, 2002]. The ability to produce, select, adapt, commercialize, and use knowledge is critical for sustained economic growth and improved living standards. The study conducted by Solow, illustrates the empirical evidence of striking difference in GDP between countries resulted from investment in knowledge [Solow, 2001].
9. The nation's competitiveness can only be achieved under the framework of strong nation's character and civilization. In this respect, the higher education system has the responsibility in providing students with strong knowledge and understanding to be good citizens, and lead meaningful lives. The higher education system should also contribute to the process of shaping a democratic, civilized, and inclusive society, maintaining national integration through its role as moral force, and act as the bearer of public conscience.
10. Meanwhile at the same time, Indonesia is still in the stage of reconstruction its economy, social, and political system after experiencing the worst crisis ever. In acquiring public fund, higher education sub-sector has to compete with more pressing sectors, i.e. basic education, poverty alleviation, and health. Although the urgency to prioritize these sectors is undeniable, neglecting and providing inadequate support to higher education would cost the nation dearly in term of its nation's competitiveness [Solow, 2001]. The strongest justification for allocating public fund to higher

education is its contribution to the nation's competitiveness, critical in a knowledge driven economy. Another important contribution is its role in supporting basic and secondary education, particularly in producing quality teachers, although in order to successfully discharge this function it requires the cooperation of agencies responsible for recruitment and deployment of its graduates. The third justification for allocating public fund is to intervene the market mechanism, by ensuring access to higher education for academically potential but financially disadvantaged students [Salmi, 2002]. Lastly, is to protect the national interests, i.e. national integration, nation and character building, and defense.

11. The government, represented by the DGHE, has a responsibility to put in place an enabling framework and infrastructure to encourage institutions to be more innovative and responsive to the needs of improving the nation's competitiveness. It should also nourish and promote community and local government participations in developing institutions in synergistic manner. It is realized, however, that the higher education system as well as the individual institution are not adequately prepared to play this role and meet such tall order.
12. Nevertheless, opportunities are also emerging from these challenges. The role of higher education in the construction of knowledge economy and democratic society is stronger than ever. Its contribution to the knowledge driven economic growth and poverty reduction is carried out through the capacity to (i) train qualified and adaptable work force, (ii) generate new knowledge to increase nation's competitiveness, (iii) access and adapt global knowledge to local use.

B Autonomy

13. Indonesia is a highly pluralistic country and diverse nation, reflected by its national credo: *Bhinneka Tunggal Ika* or *Unity in Diversity*. With dozens of existing ethnics and several hundreds different local dialects, the country might only be comparable with Europe in term of diversity. The diversity becomes more visible by considering the disparity in economic, social, technological infrastructure and natural resources. In such highly pluralistic country, a universal policy applies to every institution is not suitable. Although in urgent problems requiring quick decisions uniformity sometimes seen as the best short-term solution, it does not fit for such a heterogeneous system. Inability to centrally manage a large and complex system could also be illustrated in malpractices such as diploma mills, new types of provider (though ineligible and dubious in term of quality), fail to be accountable in executing education process, etc.
14. Decentralizing authority and providing more autonomy to institutions is considered as the best suited approach in managing such a highly complex higher education system. Bundled with decentralization and autonomy, the role of the central

government, represented by the DGHE, should also shift from regulating into more empowering, enabling and facilitating. However, it could still intervene through resource allocation and other means within the context of the national higher education system. By shifting the role, responsibility and accountability will be also shifted to institutions. Providing autonomy and demanding accountability, however, need a comprehensive and consistent policy. Each relevant aspect has to be adjusted following the policy shift, i.e. funding policy, personnel policy, governance, and quality assurance system.

15. The DGHE role is particularly critical in preparing the coherent infrastructure to impose implementation of the new policy. For example, institutional framework and legal infrastructures are two essential aspects to be prepared, in addition to expansion of the implementation of the new paradigm concept. Legal infrastructure includes Higher Education Law, necessary Government Regulations, Ministerial decree, etc. Whereas institutional framework includes adjustment of the structure and responsibility of DGHE and BHE, as well as NAB and university (including its legal status).

C Organizational health

16. The organizational health is referred to as a state of good health or well-being in an organization. In an academic institution, such a healthy organization is characterized by its ability to flourish academic freedom, highly value innovation and creativity, empower individuals to share knowledge and work to build organization success. It should also be assembled in a healthy system. It will explicitly encourage a proactive approach to managing change and each individual in becoming efficient and effective organization, with clear rights, responsibilities, and accountabilities. A healthy organization provides its members with the tools they need to adapt to complex and difficult situations. It gives them enough leeway and autonomy to deal with unusual demands and unforeseen circumstances. Imbedded in a healthy organization is an internally driven quality assurance mechanism, i.e. self-assessment and external evaluation.
17. A system comprising healthy institutions alone does not guarantee that it has the capacity to respond the environment appropriately. Likewise, a system consists of unhealthy institutions would not have the capacity to provide the expected responses. Each institution is responsible for the organizational health within its own institution, whilst the DGHE is responsible for the organizational health of the entire system. Although a healthy institution should also take into account various aspects in its environmental context (relevance, market trend, etc.), its focus is more toward its own organizational health. The same argument is applicable to the system wide organizational health, where it should focus more on how the higher education system, as a subsystem, should respond the national need.

18. Implementation of market economy in the purely sense, without adequate institutional framework and legal infrastructure to protect under privilege groups and prevent unfair competition, is never recommended, even should be avoided [Stiglitz, 2002]. A tiered competition, by grouping institutions having similar development stage, type, or focus, is more appropriate. Some institutions might not even possess the minimal capacity to conduct self-evaluation, the basic prerequisite to entry to any competition. The DGHE, therefore, has to develop policies and programs (i.e. funding and institutional infrastructure) that would encourage institutions to improve its organizational health by providing incentive, technical assistance, and corrective measures (but should be efficient in exercising it). The improvement of organizational health would be the goal in all government programs, and is chosen as the primary target.
19. Managing a higher education institution is, however, a complex operation with multi-billion Rupiah turnovers. They are in receipt of large sums from the public resources but many also generate significant funds from other sources. Even if the institutions are autonomous there must be a proper balance between accountability for public funds and this autonomy. Managers must attend to a vast range of requirements, from ensuring cost effectiveness and efficiency to assuring the highest academic standards.
20. Unfortunately, due to the previous highly centralized system that prefers compliance to a uniform standard, such capacity in most institutions is inadequate. In order to reach the level of healthy organization, a tremendous cultural change is needed during the transition. The DGHE has, therefore, the responsibility to develop and implement a systematic program to improve the institutional management capacity.

PART TWO: STRATEGIC ISSUES

I. The nation's competitiveness

A. National integration

21. Higher education institutions have been and always take vital role in nation building. Before the independence the national unity has been inspired by a few educated elites who fostered and flourished their ideas from colleges. Many prominent Indonesian founding fathers are the product of early higher education institutions established by the colonial government. In the political turmoil after the independence, higher education institutions always play their important roles through their students and academic communities as moral force that guides the changes and unite the nation.
22. Although formally the role of institution is reflected in the Tridarma, institutions also play roles as a source of conscience and inspiration to the unity of the nation. This later role will be more important at the time of discomfort and change as we are facing today in a transitional period of transformation toward modern democracy, decentralization, wider autonomy, competition, market driven economy, and globalization. The institution has to shed light to the nation of more than 213 million people from basically an agricultural society into a knowledge-based society. At the same time institution is expected to be the moral force that guide the nation toward a more democratic, just and prosperous nation. These important ideals could only be met by a qualified, autonomous, independent, and responsible institution.
23. When major shifts occur in a society, new leaders emerge in a variety of institutions. Opportunities and entrepreneurship, as well as a solid academic and scientific reputation, often characterize university reformers that emerge when such shifts occur. From our history we learned that institutional leaders can and do make a difference. Leadership development is critical for the continuous improvement of existing leaders and for cultivating the next generation of academic leaders. Institutions around the world have a proven history as a fertile ground for such leadership to grow and blossom.

B. Globalization

24. In higher education, the globalization combined with the advancement of information and communication technology, have brought a variety of new schemes in carrying out education process. From distance learning, twinning, sandwich, dual degree, to full fledged university operation, and other means, are opened and offered in various competitive and attractive ways across national boundaries. On one side, globalization is opening up new opportunities to access better learning atmosphere and more advanced knowledge. But on the other side, it also requires investment of

new resources, as well as appropriate regulations (including standards and certification) to capitalize the new opportunities and protect national interests. The DGHE as well as institutions should carefully assess the risks, and at the same time opportunities, in selecting the appropriate direction to cope with the inevitable new challenges.

25. Although character building is the core concern of basic and secondary education, intensification of national and international competitiveness will be visible in an education process emphasizing students' character enhancement (in regards with national unity values and their soft skills, i.e. people skills, communication skills, leadership). In facing globalization and speed of information' flow, the teaching methodology should be shifted to learning, instead of teaching, methodology, in order to produce graduates with immense self -learning capacity.

C. Research and education

The development of tertiary education has been considered to be very instrumental in contributing to economic and social development as well as in increasing competitiveness of a nation. It is therefore very important for a higher education institution to keep hand in hand with the science and technological development, and to stay relevance with social and economic needs within its local setting as well as in the global arena, through among others:

- a) contributing to the creation of knowledge,
 - b) reducing dependence on foreign experts,
 - c) developing capacity to sustainable exploration of natural resources,
 - d) developing the needed technology for local and national industry,
 - e) developing import substitution and improving added value of export products,
 - f) improving health and social well being, and
 - g) developing qualified researchers
26. In higher education, graduate education is the core activity in developing research capacity that it is essential to continuously strengthen and link it with any research activity. Although overseas graduate training is always important to keep abreast with the state of the art knowledge and provide the opportunity for the best fellow to be trained in the best school, it has to be very selective, particularly when it is financed by public fund. Various studies show that the productivity of graduates from domestic programs could compete with their overseas counter parts [DGHE, 2003]. Domestic graduate programs should be given fair opportunity comparable to their overseas counterparts through improvement of their competitive advantages, e.g. more reasonable unit cost of government scholarship and adequate support for research.

D. Mission differentiation

27. With its expensive resources, i.e. high quality human resources with enormous experiences of advanced training in various fields of knowledge disciplines, institution is expected to excel in undertaking research, providing education, and extending services to the community. However, research infrastructure (funding and laboratory equipment) is only available in limited quantity and quality, and student unit cost is low even compared to the neighboring Asian countries. In order to effectively capitalize its capacity, therefore, it is important for an institution to set its niche and focus.
28. In light of its chosen niche, a higher education institution may set and state its main thrust on excellence in teaching, whereas other may in research excellence. Another possible direction is to set institutional mission based on its functionality, as introduced for the Latin American context, which in this case can be categorized into four classes of functions viz. a) academic leadership, b) professional development, c) technological training and development, and d) general higher education [Castro and Levy, 2000]. The higher education institutions will be qualified for government funding in accordance with the chosen main thrust.

E. Access to knowledge

29. Due to rapid technological and market changes, any nation will also have to face with a future volatile labor market. The life cycle of required skills will be shorter and easily changed. The need of improving and shifting worker's skills will be tremendously increasing in the future. Higher education should be prepared to cope with such challenges by providing more flexible modes in accessing knowledge to employed students, i.e. distance learning, short courses, modular curriculum, and other means allowing workers to access knowledge without losing their employment.
30. Community and industry should become a closer partner of institutions in educating the students, by providing substantial financial contribution and access to learning facilities such as industrial laboratories, etc. Such closer link will improve relevance, and benefit the nation's competitiveness. In order to encourage such enhanced community participation, some schemes of incentive need to be developed, i.e. tax incentives for donation made to education.

II. Autonomy

A. Shifting roles of DGHE

31. There are two key aspects that will be able to bring about changes in institutions, i.e. the enabling regulatory environment and appropriate financial incentives, and both become the responsibility of the government. The regulatory environment must

encourage innovations at the level of individual institutions, whereas the schemes of financial incentives must be able to steer institution toward quality, efficiency, and equity goal [Salmi, 2002].

32. One of the important roles of DGHE is to inform periodically to the community at large about the universities' performances and facilitate the information flow among parties in regard with such evaluation. The evaluation based on output is the foundation for improving accountability, efficiency, and relevance in process. This will first encourage institutions to perform accountable planning of programs and human resource development. In the long run, this will diminish institutions that place mostly its role in fund generating rather than quality production of graduates.

B. Social responsibility

33. In light of the spirit in increasing community participation in supporting higher education, institution shall set its own tuition and fees. In doing so, however, the institution should take into account the disparity in students' economic background. Some scheme of cross subsidy should be developed within the institution. Likewise, government funding policy should also include new and innovative schemes, e.g. student loan and voucher, and improve the quality of support rather than focusing merely on the quantity of recipients.

III. Organizational health

A. Institutional capacity building

34. Responding to the paradigm change in the context of autonomy and decentralization, institutions should consistently improve their institutional capacity and assure quality toward a particular standard. However, due to the disparity among institutions, in terms of development stage, wealth, and opportunity, different implementation practices are needed. Good practices should be inventoried, published, and disseminated to the different groups of institution. DGHE should provide leadership and guidance, through various capacity building programs and financial as well as academic incentives for those who adopt and implement such practices.

B. University governance

35. A good system of governance is contingent upon the goal of a higher education institution and local values shaping it. It is therefore the discretion of the individual institution to set forth its own governance system. Having said all that, however, the following principles have general applicability. Good governance should promote academic freedom that recognizes the rights of academics to define their own areas to research, to teach, and to publish. In a decentralized environment of higher education

system, the system of governance allows faculties and administrators to have meaningful voice in determining institutional policies.

36. In a healthy institution, a strategic plan, which is developed based on self evaluation, becomes essential. The institutional top management should be fully committed in the process of developing the strategic plan, including the involvement of internal community and stakeholders. Moreover, the top level of management has to assure that the strategic plan will be used as a reference by all management levels. In order to have a strategic plan that is organizationally linked to operational plan, there is a need to delegate appropriate authority that is clearly stated in the institutional governance. In setting up its governance individual institution should seriously adopt the principles of good governance.

C. Financing

37. Higher education in Indonesia is considered under funded compared to other developing countries in Asia. The table shows that China, Thailand, and Malaysia, which significantly increase its enrolment during the last 20 years, started with much higher public funding allocation. Starting with relatively low public expenditure per student, without meaningful budget increase, even small expansion in Indonesia cost the higher education system dearly in term of quality.

	<i>Public expenditure per student / GDP per capita (%)</i>		<i>Gross enrolment ratio (GER)</i>	
	<i>1980</i>	<i>1997</i>	<i>1985</i>	<i>2002</i>
China	246.2	65.3	2.9	13.2 (2001)
India	83.3	92.5	6.0	6.5 (1995)
Indonesia	25 (1985)	12.3	8.5	12.8
Thailand	59.7	25.4	18.1	31.92
Malaysia	140.6	53.6	5.8	28.26
Philippines	13.7	14.8	n/a	29.45 (1999)
Vietnam	n/a	86.1	2.3	9.66 (2000)

Source: DGHE: Higher Education Sector Study, 2003

Public expenditure in higher education and enrolment for selected Asian countries

38. Even without any expansion, higher allocation of public resources for higher education is needed, as illustrated in the aforementioned table. In order to significantly contribute to the national competitiveness, therefore, it is important to consistently advocating for higher allocation of public resources, and at the same time continuously improving the efficient and effective use of the fund. If the constitutional mandate is to be met, the proportion of public resources per student allocated for higher education should be increased at least 4 times, to the level of 50% of GDP per capita.

39. There is also an endless debate as to whether higher education is public or private goods or even both. There is however an interesting trend to increase community participation in financing higher education through among others, reasonable level of tuition rate, private donation, university industry collaboration, and involvement of local government. An institution, in return, needs to be accountable for its promise to deliver, and should provide financial assistance to those in need. The aforementioned contributions should only be accepted as long as they are not conflicting with academic norms and values.
40. Under the existing law on regional autonomy, local government has stronger capacity to support education sectors including tertiary education. Meanwhile, higher education undeniably could provide a significant contribution to the local economic development. Participative financing structure combining all financial resources capacity available, at central and local governments, community as well as industry, should be carried out in a synergetic manner. Nevertheless, the increasing participation of local government and community should not undermine the higher education role in national integration.
41. As far as public resources are concerned, a carefully designed funding scheme must be developed. The primary aim of such scheme is twofold, firstly to make the funding more efficient and cost effective, and secondly to drive the higher education institutions to improve their organizational health.
42. Of particular and subtle aspect in financing scheme is the need to cover high cost of maintenance. The legacy of the previous strategies has resulted in the condition that many institutions are over-invested, particularly in physical and human resources, beyond their capacity to effectively utilize and maintain.
43. Fundamental to the implementation of good management and effective use of resources is the practices of internal accounting and audit. Accounting is to be a central mechanism in the breaking down of university activities between managers including deans and heads of the departments, so that responsibilities might be more clearly distinguished, objectives more clearly defined, and costs and outputs clearly assessed.

D. Human Resources

44. Findings so far clearly indicate that most higher education institutions, particularly in the public sector, are at the same time over and under-staffed. It is over-staffed in term of quantity, and it is under-staffed in term of quality. In addition, moonlighting practices is rampant and in some cases there are mismatch. The civil service system is inappropriate for higher education environment, i.e. recruitment and discharge, performance evaluation, incentive, and promotion. In this regard, possibility of

having a new human resources management system, suitable for academic environment, need to be explored.

45. In private sector the primary issue in human resources is to deal with insufficient quality teachers. In term of quantity, the most critical problem is its over reliance to public institutions' staff, who are moonlighting. Most private providers still also have to struggle with the increasing cost of technology and debt service due to initial investment, to be able to adequately invest in staff development.
46. In autonomous public institution (BHMN), the challenge is to develop a new human resource management system, including recruitment, career development, retirement, remuneration and benefits, and more flexible engagement. Since the shifting of civil service status to university employee is unavoidable, a transition plan should also be developed to avoid unnecessary disturbances to the academic life. More critical is the issue of personnel expenditures, which previously is fully allocated through the government DIK.

E. Quality assurance

47. In a healthy organization, continuous quality improvement should become its primary concern. Quality assurance measure should, be internally driven, institutionalized within each organization's standard procedure, and could also involve external parties. However, since quality is also a concern of all stakeholders, quality improvement measures also aims to produce quality outputs and outcomes as part of public accountability. BAN, professional associations, and other independent agencies, could play a key role in conducting an objective external control and audit based on certain standards. Considering the disparity currently existed, minimum standard requirement should be developed by peer organizations, e.g. BHE, BAN, and other independent agencies, and imposed. In this regard, the government shall serve the function of providing information on institutional quality to the public.

PART THREE: IMPLEMENTATION STRATEGY

I. The nation's competitiveness

A. Excellence

48. *The requirement for excellence*

It is difficult to deny that excellence requires adequate resources. Due to relatively existing low level of public funding for higher education, the DGHE would aggressively promote and convince the concerned parties on the importance of greater public funding to support higher education. In return, the system as well as institutional wide should continuously improve the efficiency and effectiveness of its use.

49. *Quality in expansion*

The economic downturn has challenged the government effort for amplifying the rate of participation. One way to approach this dilemma is to encourage institutions to put emphasis on producing quality human resources rather than merely on increasing quantity. Expansion should only be justifiable if there is a clear demand from the market workforce. Each institution will be urged to demonstrate the quality of their graduates. In the mean time, the DGHE and the NAB will seriously consider outcome indicators as a measure of the stated quality in their evaluation.

50. *Delivery method*

In order to excel, it is important to adopt delivery methods best suited to achieve learning objectives, by for instance shifting from teaching centered to learning centered, through accommodating the needs to balance between academic excellence and fitness for quality purpose, the needs of the students, and more flexible learning approaches. The effect on teaching should be taken seriously because of several potential changes in the way students might approach their learning needs.

51. *Teacher's training*

Higher education has a critical role of producing qualified teachers for basic and secondary education, if quality higher education is the target to achieve. Currently both levels of pre-service training programs are conducted utilizing the concurrent model, however, there is no justification for overly restrictive in this respect. The viability of the consecutive model that requires prospective teachers to possess S1 degrees in relevant disciplines before admission should be explored. Such program might offer an additional one-year training in professional teacher education, that culminate in the awarding of appropriate teaching certificates for certain subject

matters, approximately equivalent to foreign BA/BSc or Dip.Ed². Furthermore, in view of the wide diversity found throughout the Indonesian archipelago especially with respect to social-economic conditions, the provision of educational services could not be fully subject to raw market forces. Therefore, coordination with relevant agencies responsible for the recruitment and deployment of teachers particularly for the lower level would be a prerequisite if the DGHE is expected to be successful in discharging this immense responsibility.

52. Research

In setting up research priority, DGHE would promote a consistent implementation of national priority accompanied with adequate funding that can foster the development of institutional research focus/niche. Whilst institutions are encouraged to differentiate their mission and develop their specific niche based on comparative and competitive advantages. Competitive grant based on an objective peer reviewed system should be further improved by developing tiered competition system for institutional development, investment, and research grants. International collaboration in research and graduate program should be provided by incentives and the needed legal framework. A closer university–industry–government collaboration is important to drive university research into industrial application, and to bring industrial problems into university environment without sacrificing ethical and moral values. A reform in research management at individual institution is needed to optimize resource utilization and maintain the investment.

53. University research is more complex and multifaceted compared to industry and government research. In addition to the advancement of knowledge and serve the public, it also serves the functions of educate students and prepare the new generation of researchers. Student involvement is, therefore, a key feature in university research that distinct it with other research institutions. Strategy in human resources development should be bundled with research strategy by effectively capitalized its capacity. The graduate program, a research based education program, should be strongly linked with staff research and provided with adequate fund to do research that meet local needs and solve local problems therefore improve relevance, quality, access and equity and give direct benefit to society. Investment for overseas degree training should be limited to certain priority disciplines (where domestic capacity is inadequate) and should only targeted to world class institutions. Improvement of quality and productivity/capacity should be developed through efficient use of resources and better quality assurance system in graduate education.

² The word “approximately” is deliberately used in this context since, different from first degree programs in other countries, the S1 programs do not include what is known as a Liberal Arts component in their curricula. Consequently this significantly limits the academic background of their graduates due to specialization that starts practically the first day the students begin their programs, making them unprepared in coping with the academically more comprehensive challenge of teaching.

54. *Soft skills*

The current world of work requires university graduates to accomplish their tasks and responsibilities based on *creativity* and *initiative*, in addition to their academic training. Universities will have to develop a learning system which can help graduates learn beyond their skills and expertise. The system must balance between the short-term needs of the labor market for specialized experts and the long term benefit from “soft skills” as a future investment [World Bank, 2000]. In addition to the present emphasis on cognitive ability, in facing with future demands, a creative capacity to deal with uncertainty must be given an important place. It has to bring into the classrooms not only factual knowledge or “hard skills”, but also “soft skills” derived from experiential knowledge, which can help students to familiarize with the tension of innovation and emotional difficulties during his/her interaction with society.

55. *Art*

Art, particularly that is rooted at noble indigenous tradition and culture, is critical for strengthening the nation’s character in addition to personal growth for developing creativity and innovation [Zainuddin, 1994]. Therefore, the development of art education is strategic. Art education should be crafted to bring about common outcomes through academic approach that tolerate flexible learning environment, different teaching styles, and classroom practices based on variety of pedagogical methods. The art education should be capitalized to benefit the entire education sector, and at the same time, improve the nations’ competitiveness. In order to fulfill such demand the existing art education, including curriculum design and staff development, need to be reformed; whereas the appropriate learning facility and research focus need to be aligned.

B. Equity and social responsibility

56. *Private providers*

Since the nation’s competitiveness depends on the availability of highly skilled labor, the need of increasing the participation rate, which is relatively low compared to other neighboring countries, is unavoidable. However, with the current stage of economic development, it will be difficult to carry out such expansion without compromising the quality, which is a key determinant of nation’s competitiveness. Expanding the opportunity to private providers could shift the burden from public resources, provided the acceptable quality standard could be met. In the case of overseas providers, the DGHE should prepare the necessary legal framework for their operation. It is paramountly important, therefore, to continuously strengthen and improve the institutional capacity to assure quality, i.e. NAB, BHE, peer organizations, and professional associations, and at the same time bundle financial incentive with institutional performance.

57. *Continuing education*

The demand for access to higher education has far exceeded the ability of the system to provide. The demand for more access is not limited to those in the school age bracket of 19-24, but also mature or employed students, e.g. in-service training for school teachers, specialists in particular field of industry, and life long education. In addition to the traditional modes of training, distance education could play an important role to ease the pressure of increasing demand. In many cases, knowledge on recent scientific and technological advancement is more important and degree is not the primary concern. Institutions are encouraged to fulfill such needs through developing linkages and DGHE will provide the necessary institutional framework.

58. *Distance education*

An effective distance education program, however, should have a well-designed delivery method suitable for a well-targeted segment of population. The segment chosen should be clearly stated in the objective of the program. The materials should be adequately prepared, the methodology should be properly designed in its pedagogic and cognitive aspect, and apply a rigorous quality assurance mechanism. The advancement of information and communication technology, have brought a variety of new schemes in carrying out education process in distance education. Open University and other institutions, which possess adequate capacity to carry out such task, should be capitalized to meet the demand. In this regard the DGHE as well as individual institution should prioritize the provision of ICT infrastructure to develop such capacity.

59. *Affirmative program*

The current economic crisis has caused at least 35 million of the population currently live below the poverty line. This inevitably gives rise to serious problems for the under privilege group to enter public as well as private higher education institutions, affecting the ability to reach the expansion target and maintain quality standard. In addition, it is found also that the current development of higher education has brought with it severe disparities in a number of aspects, including geographical, and to some lesser extent gender, endangering the national integration.

60. The government as well as private providers should respond to the abovementioned problems by implementing affirmative actions in the form of establishing policies for supporting such group, including:

Ø *Scholarship Program*: various forms of scholarship targeting at various groups of students (disable, gender, special talent, etc.) are possible. The government scholarship shall be centrally managed by the DGHE in cooperation with institutions. Private providers have also the obligation to allocate special fund for the same purposes. Other sources of scholarship could be defined by its contributors. In this scheme the quality of scholarship, covering all of students' basic needs, i.e. travel, tuition, living cost, and books, is very important.

- Ø *Student Loan:* The loan will be categorized as soft-loan with interest rate lower than commercial rates, and the repayment will be made after a student completed his/her study and engaged in a job. Here the government and private donors subsidize the difference in the interest. More innovative implementation schemes should be further explored to minimize the risk of high default rates.
- Ø *Voucher Program:* the government is channeling subsidies to support under privilege groups of society eligible and wish to enter higher education. An essential element of a voucher scheme is that such students are receiving government subsidies in terms of entitlements for free enrolment at the educational institution of their choice. Other variations could be explored to accommodate the variety of needs.

61. Due to the above notion, these aforementioned programs shall be best coordinated with other relevant government agencies, financial institutions, as well as other donors. The implementation scheme can of course be jointly conducted with higher education institutions. Although it will be directed that institutions are obligated to recruit students regardless their financial background, the government will provide incentives for the institutions recruiting students from under privilege groups.
62. Individual institution might have to develop program to support implementing the above initiatives, for instance in identifying and recruiting the under privilege groups. Considering the disparity existed, a special treatment for them might also be needed even after they are admitted. Some form of remedial program for beneficiaries recruited through the aforementioned programs should also be developed.

II. Autonomy

A. Legal reform

63. The role of DGHE

In light of decentralization of authority and the provision of greater institutional autonomy, the role of DGHE is critical in providing the regulatory environment and financial incentive. The key dimensions of regulation are: a) the rule for establishment of new institutions; b) quality assurance mechanisms; c) financial controls on public and private institutions (through government budget allocation); and d) intellectual property rights legislation. The schemes of financial incentives must be able to steer institution toward quality, efficiency, and equity goal. The schemes should include: a) linking resources to measure of institutional performance; b) encouragement of resource mobilization by institution; c) competitive funds for investment in quality improvement; and d) student financial aid [Salmi, 2002].

64. Restructuring of public funding

Although various experiments in decentralizing the authority by providing more autonomy and demanding more accountability have been relatively successful in introducing the new paradigm concept and imposing quality awareness, it becomes apparent that further implementation would only widening the audience rather than deepening the penetration toward more substantive reform. The DGHE should conduct rigorous cost analysis, measure budget performance and control, reduce rigidity to the extent possible, whilst providing assistance on planning budgeting and financial management to institutions. At the institutional level the financial system should also reduce rigidity in using the budgeted funds. The institutions, in turn, should develop an internal financial management specifying the authority of Faculty, Department, and other units in planning and in spending the approved budgets.

65. In term of government funding, initiative to introduce competitive funding mechanism, so far, could only cover the investment part of the public resources, whilst the recurrent part is so far still untouchable. Even the investment part, reform could not yet fully implemented yet, e.g. simplifying procedure. Introduction the similar spirit to some key funding elements, such as recurrent block grant, recurrent budget reflecting the previous level of investment, and performance based incentive in personnel expenditure, still need a major concerted effort to find the possible solutions.
66. At the institutional level, to synchronize all budget sources, each departmental Unit has to provide and implement consolidated and integrated budgeting system. The system should integrate the complementary funding from routine budget (DIK), development budget (DIP), and self generated revenue (DIKS) in a format to relate the contribution of complementary sources in supporting the related program and activities proposed. To implement the system, each university should establish a departmental planning and budgeting processes which provides departments with budgets designed to deliver identified levels of education. Department heads should be given maximum authority in the use of budgeted funds to meet university objectives. An incentive system of recurrent budget will be established to provide reward and penalty for those who can better perform.
67. *Personnel and civil service*
In term of personnel management, institutions should acquire the capacity to develop a strategy on management and development of its human resources. The DGHE would lead the initiative to introduce reform in university personnel management in order to acquire benefits,
 - a) improving institutional autonomy by decentralizing the authority over all university staff, including implementation of merit based recruitment, termination and retirement, performance based career development, reward system (incentives as well disincentives system), and reducing bureaucratic chain;
 - b) empowering institutional leadership through full accountability over its personnel performance; and

c) demanding staff to be accountable to the institution and their direct supervisor. The detachment of university staff from civil service has already become a global trend in the last 10 years, and had already been implemented in among others, the UK, Australia, Chili, Brazil, South Africa, and the Eastern European countries. Such reform is also currently being planned in most Asian countries, and should be promoted and initiated by the government.

68. Considering the possible social impact it might cause, the transformation of public university staff from tenured civil service into contract based university employment, as planned in BHMN, should be carefully designed, by involving relevant agencies, i.e. BKN, in the process. Other possibilities to provide university staff with special treatment or exemption from the uniform civil service regulations, might also worthy to explore, such as contract based civil service, part time permanent staff, etc,

69. *Legal status*

In term of legal status, a public university is treated as a government bureaucratic unit, and has to comply with the same regulations applicable to all units under a Ministry. As applied to other structures in the government bureaucracy, accountability is hierarchical to the direct supervisor, instead to the stakeholders. Such legal status does not provide public universities with the necessary autonomy to develop itself, and play a credible role as a moral force. Although PP 61/1999 is intended to provide a comprehensive solution to the legal status problems, lessons learned from pilot implementation show that it still falls short in meeting the expectation, and a more solid legal basis is needed. Likewise, private institutions should be eased from the similar limiting regulations. The DGHE will therefore lead the initiative to develop a systematic program involving inter-ministerial agencies to develop necessary legal infrastructures, which will smoothen the implementation of the initiative to introduce a new legal status.

70. *Tax incentive*

In order to complement the relatively low public resources allocated for higher education, a legal framework providing encouragement for non-tuition community participation is needed. In this regard, the DGHE will develop a program to explore and discuss with relevant government agencies a variety of tax incentives for private donation, university industry collaboration, establishment of science parks, as well as reduce or even eliminate import duty for books and other educational materials.

B. Funding Structures

71. *Competitive funding*

Since government funding for higher education is relatively low compared to its counter parts in Asia, effective and efficient utilization of the fund is highly critical. Government budget consists of the investment and recurrent part. The investment

part of government funding will gradually rely more on competitive basis with clear targets and indicators, eligibility, and criteria including the capacity to operate and maintain previous investment. Following the currently implemented competitive funding scheme, the investment grant is provided through a budget envelope, developed through a proposal based mechanism. The proportion of government investment allocated through competitive scheme will be increased significantly during the next few years.

72. Restructuring of the recurrent budget

The ideal format for government recurrent budget should include both operational and maintenance costs, determined by rigorous formula that recognizes the past performance of the higher education institutions. The recurrent block grant constitutes two main parts. The first is related to the cost for producing graduates, and the second one is incentives for excellence. The later can be geared for instance toward the development of research activities, excellence in teaching, or carrying out special task of strategic important to the national development. Each part will be calculated based on a formula that account for both quantity and quality aspects. Under the above proposed financial scheme, the maintenance cost is included in the recurrent block grant. Thus, institution is expected to carefully calculate and plan its utilization and maintenance program for its overall resources.

III. Organizational health

A. Capacity building

73. Structural adjustment at DGHE

Management capacity at the DGHE level should be developed, particularly to accommodate its new role under the spirit of autonomy and decentralization. It needs, therefore, to carry out structural adjustment and develop a wide spectrum of capacity, among others,

- a) the necessary institutional framework and legal infrastructure;
- b) convince concerned parties and public at large regarding the importance of providing larger allocation of public resources to higher education;
- c) financial and management post audit in conjunction with assessment of institution's performance;
- d) effective monitoring system based on reliable data analysis by capitalizing the existing information technology; and
- e) development strategy based on different stages and tiers.

74. Considering the importance of such capacity, it is essential to rely more on the competence of carrying out its structural function rather than structural authority. In the case of the internal capacity has yet adequate to carry out the function, other alternatives (i.e. outsourcing) should always be explored.

75. *Peer organizations*

As a consequence of decentralization, the role of peer organizations, e.g. BHE, becomes more important. In addition to strategic advices, it needs to develop a pool of qualified experts to fulfill the following functions,

- a) reviewing proposals,
- b) monitoring the academic aspects of projects implementation,
- c) conducting policy studies,
- d) developing capacity building programs, and
- e) disseminating good practices of university management.

In carrying out their task, however, these organizations should be loyal to its function as peers, and distance itself from executive's decision making process as well as operational activities.

76. The role of BAN is at least as equally important in the context of autonomy and decentralization, particularly in the aspect of quality assurance. It has the primary role of informing the public on the quality of each individual provider. New approach and strategy, however, are needed to cope with the challenge of constantly increasing number of programs offered. It should align its improvement program to the DGHE strategy and interrelate itself with other peer organization strategies without sacrificing its autonomy. In the context of globalization, it should systematically internationalize the accreditation system through, among others, conducting proper benchmarking, attaining regional and international recognitions, and developing collaboration. This is also expected to eventually accelerate internationalization of Indonesian universities.

77. *Institutional capacity building*

All efforts in capacity building will be converged at the capacity at the institutional level. All other parties, i.e. DGHE, BHE, and BAN, could only facilitate and provide the necessary institutional framework and legal infrastructures for each individual institution to develop itself. Central to this concerted effort is the internal capacity within each institution. After the institutional capacity is in place, it is the responsibility and accountability of each institution to develop itself, and build its credibility as a moral force. It is, therefore, paramountly important to develop a capacity building program within each individual institution.

78. It is realized that due to the existing sharp disparity in institutional capacity, some institutions are less prepared to cope with this challenge. The capacity building program should be tailored for the different level of institutional needs. It is the responsibility of the DGHE to provide a special nurturing program as a "safety net" for those with the least capacity.

79. *Good governance*

Institutions should carefully choose the appropriate procedure in selecting its own officers, in accordance to the principles of good governance. The very fundamental spirit of academic life, where merit has higher priority than popularity or political consideration, should be taken as the basic academic value. In a country that has just been freed from 32 years of draconian rule, such consideration might be important to protect the academic life from the influence of political democracy. Learning from experiences of the Latin American higher education system, the *Cordoba Manifest* should be avoided [Schwartzman, 2001]³. It is, therefore, important to define positions that need to be elected, appointed, or a hybrid of both.

80. Meanwhile, students are provided with rooms for posing constructive inputs in areas that affect their academic lives. Such freedom and allowance are not absolute, they have limits and require accountability. Therefore, the governance system needs to make clear rights and responsibilities for each element. Enlightening governance system needs to regulate selection and promotion of faculty, administrators, and students to be based on merits, free from collusion and nepotism.

B. Institutional cooperation

81. Merger

By the year of 2001, there are 2012 higher education institutions across the country, enrolling the total of around 3,5 million students, which make each institution enrolls only 1,500 students on the average [DGHE, 2003]. Considering that carrying out educational programs is a costly business, the existing condition is still far from economical. Further investigation indicates also that in terms of resources there are sharp disparities amongst higher education institutions. Thus, DGHE should develop criteria regarding a well-functioning institution as a basis to identify institutions need to be merged and amalgamated. Such initiatives would be encouraged and provided incentives (e.g. technical assistance).

82. Collaboration

DGHE would facilitate the development of the triangle of learners consisting of students, lecturers, and professional communities. Both students and university lectures could improve their soft skills by taking advantage from the continuous learning program established by the industries. Furthermore, placing industrial communities as educational partners will flourish the study relevance that is important for industries.

³ According to the *Cordoba Manifest* (1918), universities should have a complete autonomy (independent republic of scholars), whilst it is mandatory for the government to keep financing them. A university is co-governed by students, faculty, and administrators (originally alumni), from the election of rector to day-to-day decisions. The result is a highly politicized and militant environment, a complete isolation from the market, and irrelevant as well as incompetent graduates.

83. Greater collaboration between institutions in teaching and research is also needed. In this regard, it has to compete and at the same time cooperate, treating its competitor as partner. It has to extend its networking and strategic alliance beyond national and geographical boundaries. Mechanisms must be found to ensure that qualified staff and students, irrespective of location, to get involve in the collaboration and provided access to the necessary facilities. Sharing of facilities, skills and expertise should be encouraged and given incentives through new initiatives such as voucher for graduate students to carry out their research in the industry, and for institutions providing such opportunities to other institutions.
84. Currently internal collaborations between units are still rare, resulted in isolated discipline based teaching and research, unable to comprehensively respond to the real world trend of merging disciplines and fields. Therefore, collaborative work between units within an institution should be encouraged, e.g. inter Departmental and cross Faculties study program, cross offering of courses, and inter Departmental joint research in student final project.
85. Though the promotion of academic competition is indispensable for the advancement of knowledge, the academic world should also encourage the emergence of interdependence of humanity. Such commitment will help *'to narrow the gap between nations and between regions, not only in the fields of science and technology but also to improve understanding between individuals and between peoples so as to promote the culture of peace'* [UNESCO, 1995]. Preparing future leaders and citizens for a highly interdependent world requires a higher education system where internationalization promotes cultural diversity and fosters intercultural understanding, respect, and tolerance among peoples. Institutions should be given financial incentive to establish international exchange programs both in teaching and research with world leading institutions. Such incentives include scholarship and any other financial supports to facilitate scholars and students exchange. Such internationalization of higher education contributes to build more than economically competitive and politically powerful regional blocks; it represents a commitment to international solidarity, human security and helps to build a climate of global peace.

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